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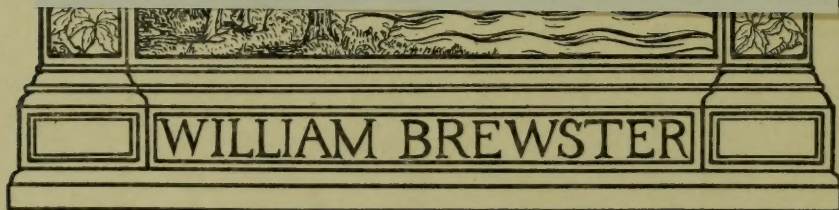
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RECREATION

A MONTHLY MAGAZINE DEVOTED TO EVERYTHING THE
NAME IMPLIES

VOLUME XII.

JANUARY, 1900, TO JUNE, 1900

G. O. SHIELDS (Coquina), Editor and Manager

NEW YORK :
23 W. TWENTY-FOURTH STREET
1900

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RECREATION



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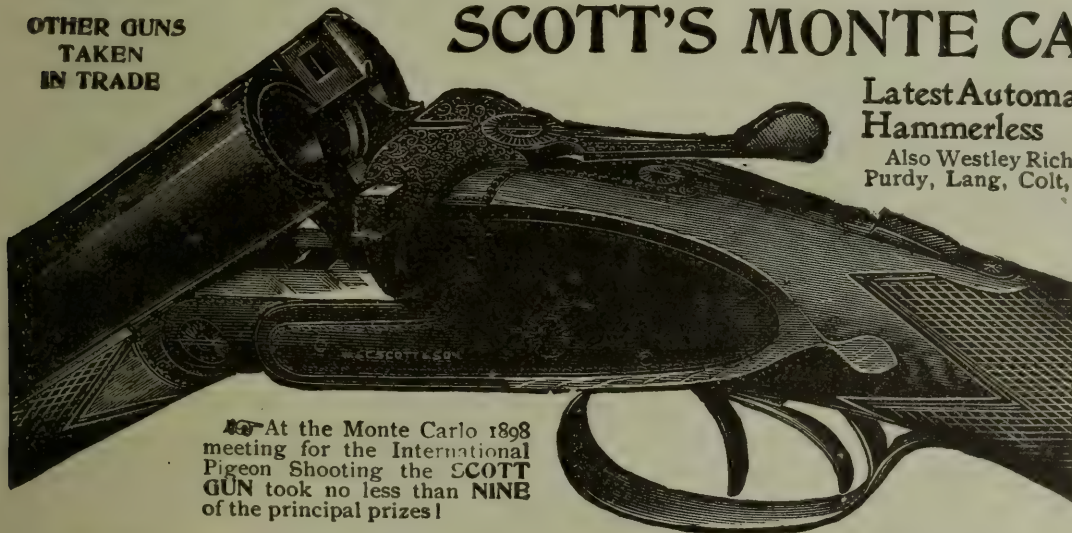
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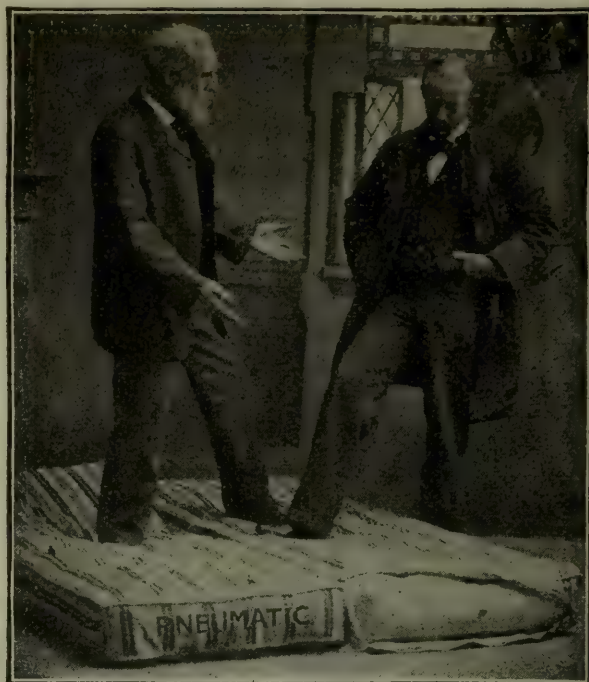
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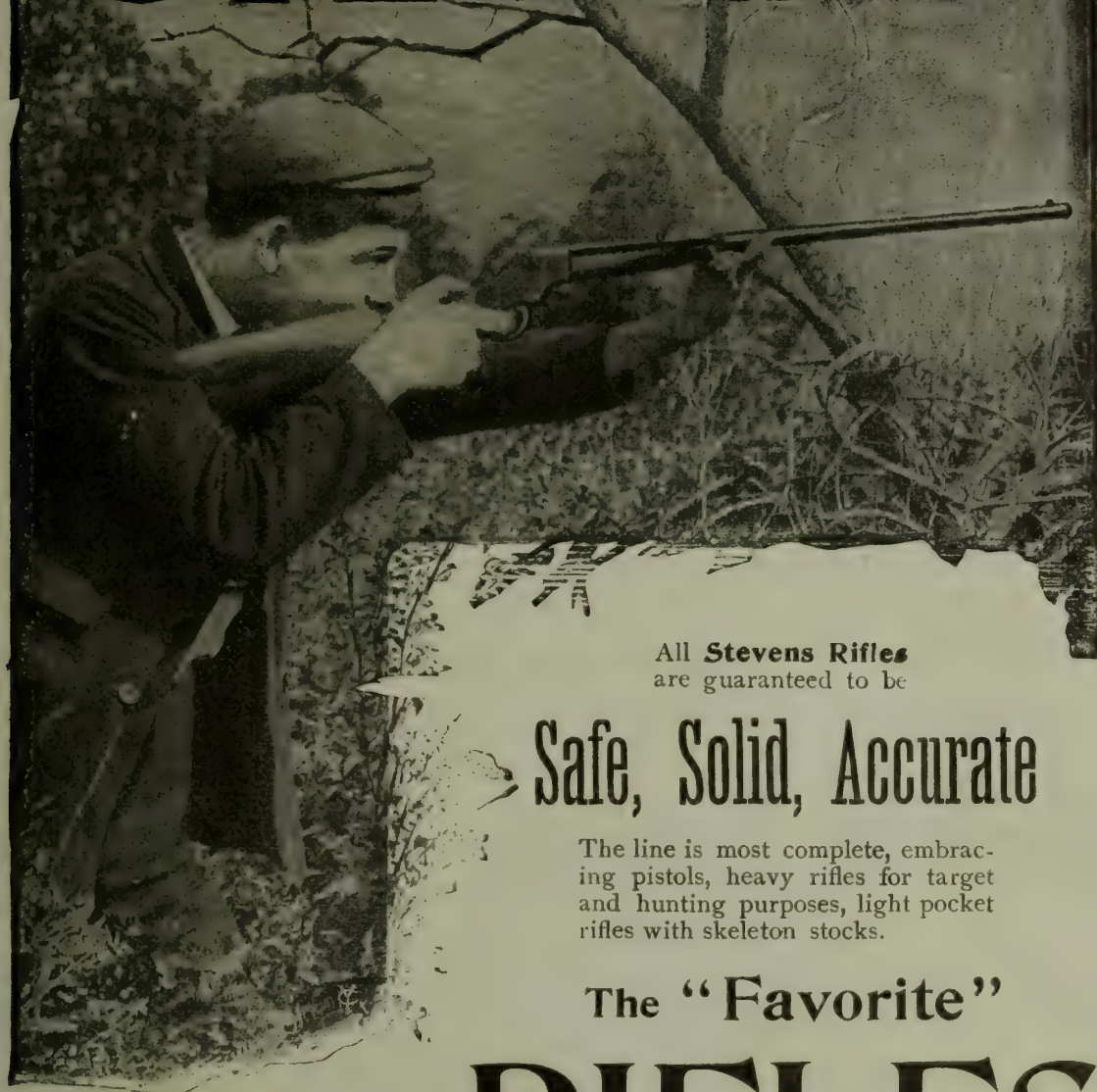
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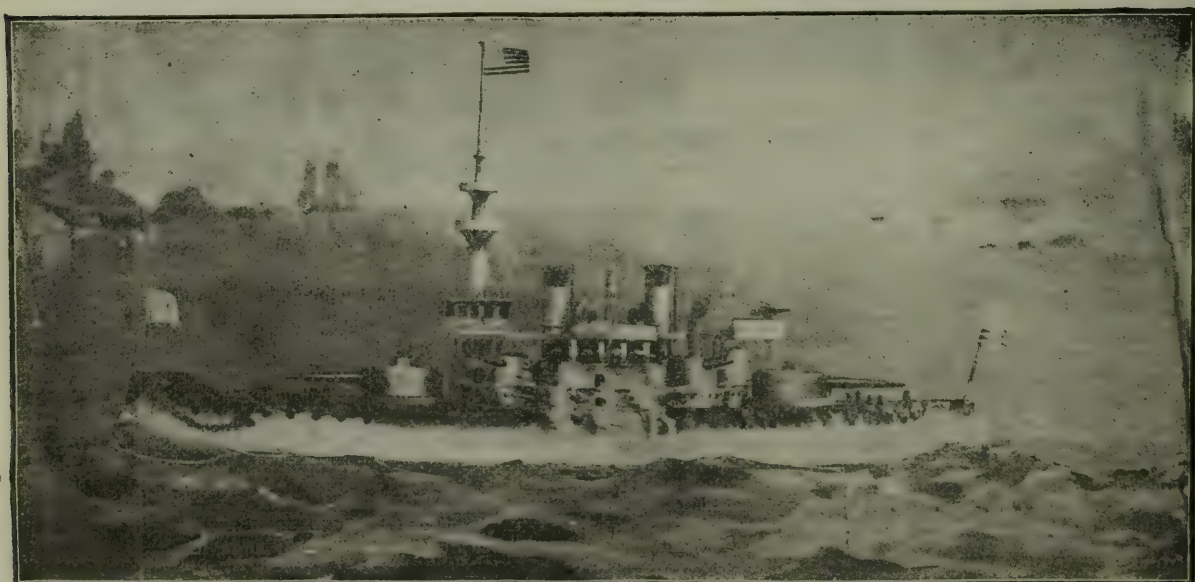
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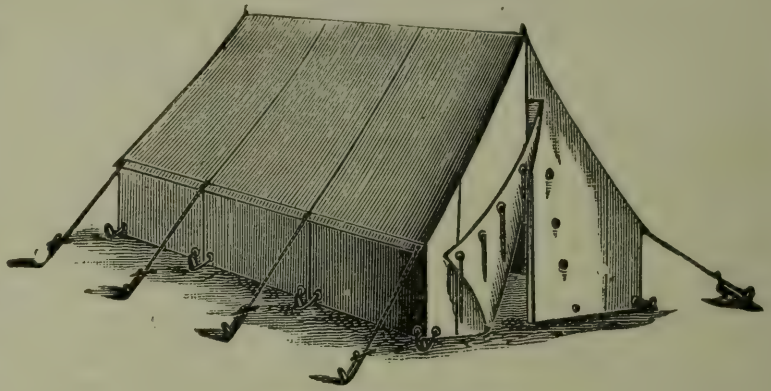
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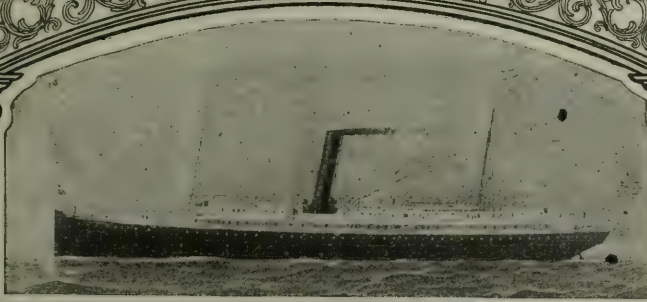
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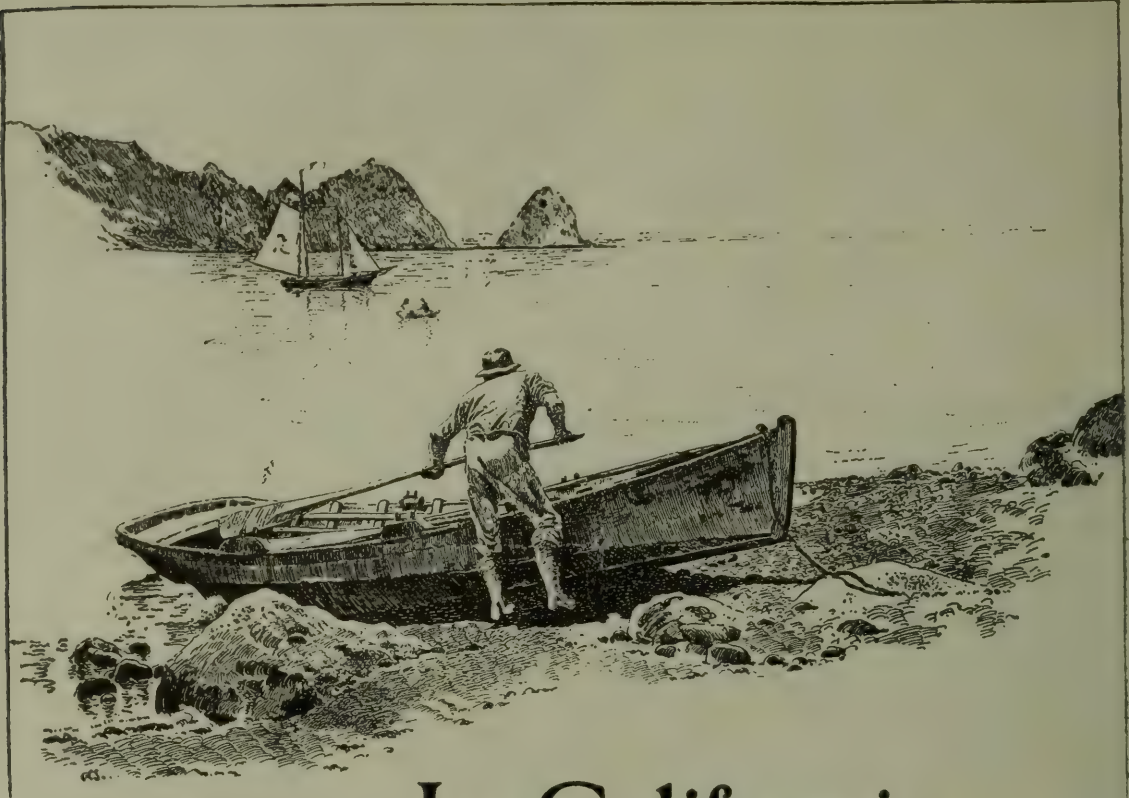
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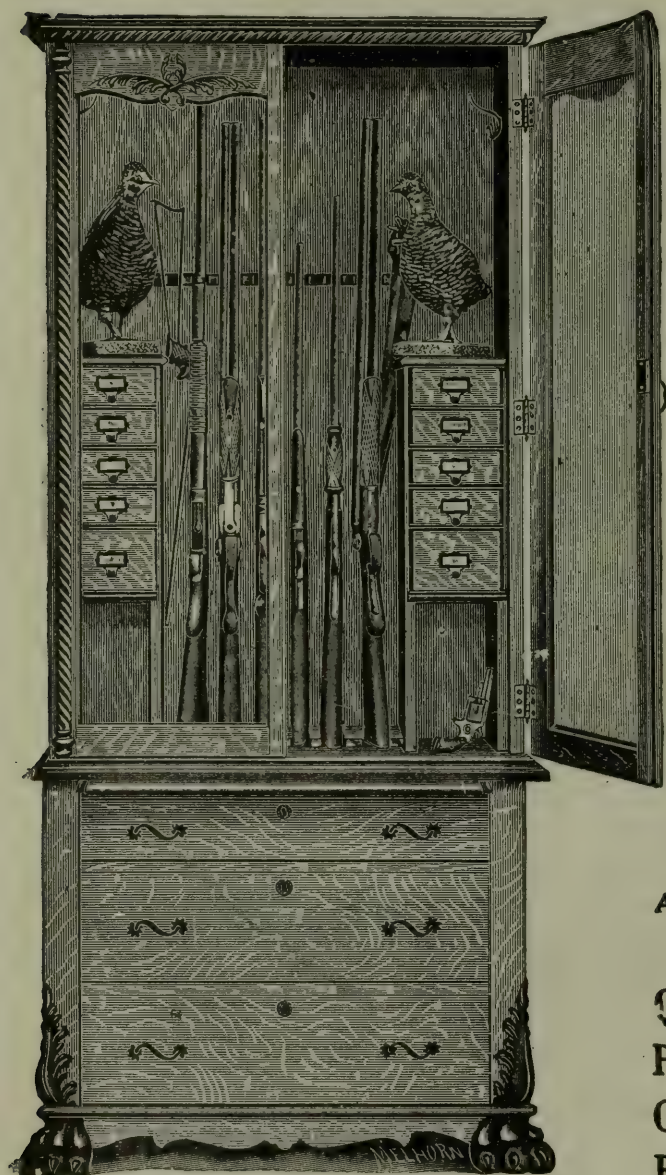
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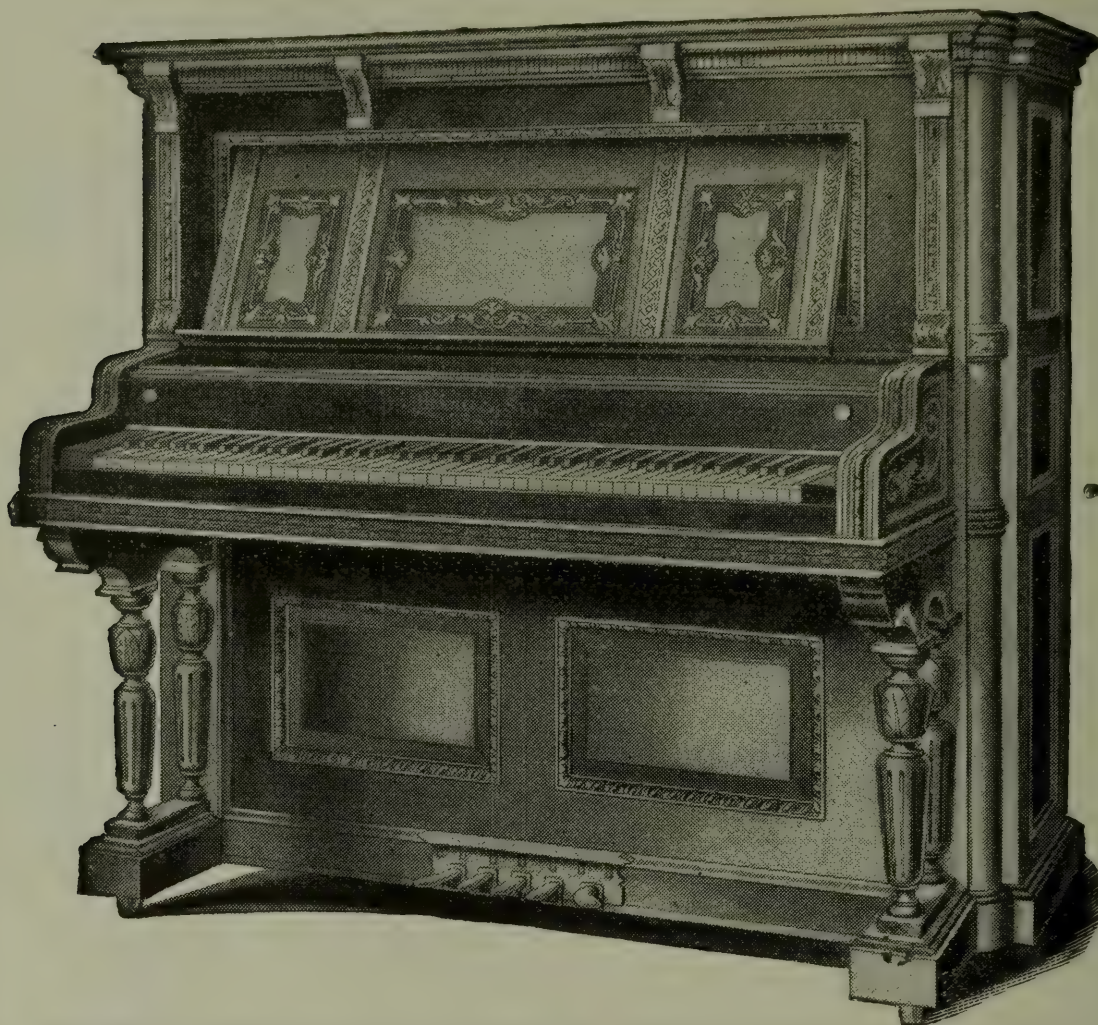
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City of Grand Rapids.

George R. Perry,
Mayor.

City, October 24, 1899.

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City.

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(Signed) F. W. HUNTER,
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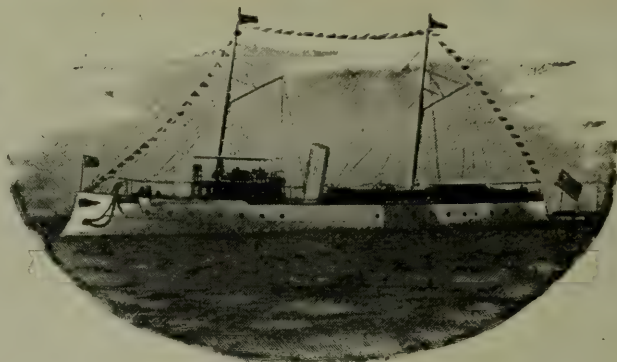
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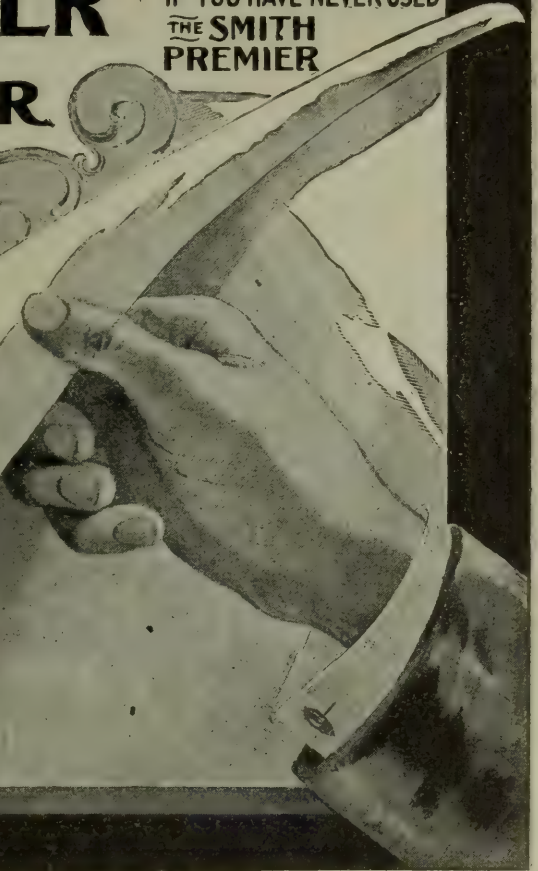
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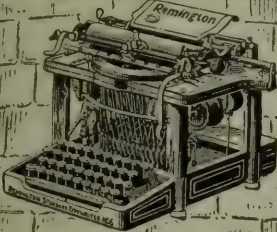


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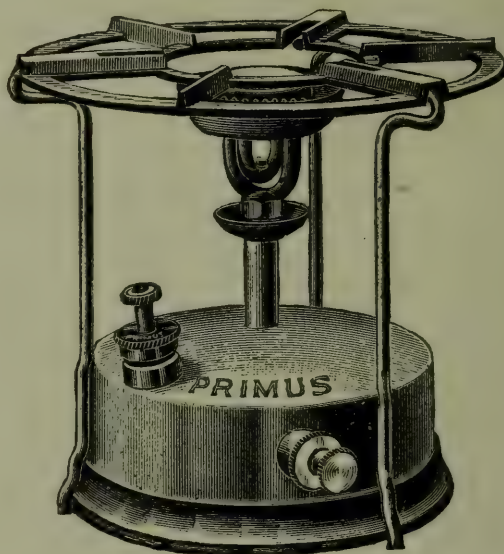
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RECREATION

Volume XII.

JANUARY, 1900.

Number 1.

G. O. SHIELDS (COQUINA), Editor and Manager.

BEAR IN YELLOWSTONE PARK.

FRANK A. JOHNSON.

The arrival of another number of RECREATION, containing, as it always does, so much of interest to me, suggests a brief account of a recent trip, with one of my sons, through Yellowstone Park, past Jackson's lake and the Tetons, and to the head waters of Pilgrim, Pacific and Buffalo creeks, near the Southeast corner of the Timber Reserve and Two-Ocean Pass.

Al. Pfohl, of Fridley, Mont., who owns a ranch 19 miles North of Cinnabar, was employed with 3 saddle horses and 3 pack horses. We took our own sleeping bags, saddles, etc., and have learned to make such trips with one pack horse for each man. Camping consisted of taking off the packs, and if raining, stretching a small fly over a rope between two trees. Our .30-40's were of course sealed at Mammoth Springs and remained so until we reached the Snake river station, where they were again sealed on our return trip. The fore part of September necessarily constituted our hunting season, and 2 5-point bull elk satisfied all our wants, and furnished meat to give away to others less fortunate. We did not see with our glasses a single bull with more than 5 points and concluded they are becoming rare, but had fine opportunities to observe the habits of this noble animal.

The country South of the Timber Reserve is superb in rugged, rocky

chains and peaks, large and small open parks, and dense patches of pine, spruce and aspen. With a little care in selecting places of ascent and descent, one may abandon all trails and creek valleys, and roam over the country at will on the cat-like native horses. A large part of the pleasure of our trip was found in photographing. I send you a picture of the Keppler Cascades, on the Fire Hole river, a few miles above Old Faithful geyser, and one of the lower Yellowstone falls.

My main purpose in writing this letter is to suggest to those who contemplate a trip through the park, to go with saddle and pack horses, instead of stages or wagons, coming out by way of the Yancey trail. The traveler confined to the road sees little of the wild scenic beauty of the country.

Another purpose is to urge my readers to take with their camera the flashlight apparatus, as the opportunities for flashlight pictures of wild game are abundant. The want of such apparatus prevents photographic proof of the truth of my story of our experience with bear in the park. A recent report of the Park Superintendent states that bear have become too numerous. We can testify to that, and would be willing to assist in reducing the number, but cite this statement as tending to support our story. The daily press has recently published



A BIG BEAR CLIMBED INTO HIS WAGON.

many accounts of the bear fed by "Larry," the jolly proprietor of the Norris geyser lunch station, and those visiting the Fountain hotel and Upper Geyser hotel, so we will only deal with those about the Thumb, and near the canyon. We came down to the Thumb, out of the mountains, in a driving rain storm, and strung our fly near the lunch and military station because a small open valley there was the only grazing spot within 2 miles. Before it was fairly dark 2 large grizzlies passed within 50 feet of us and made an attack on the garbage box, about 40 yards away. Within an hour 5 other bears came in. At times we had their outlines against the sky, and some were monsters. We approached within 50 feet, but they were not disturbed, and we did not deem it politic to go nearer. During the evening several came within the range of our fire, and in the morning we found 3 tracks within 5 feet of our sleeping bags. Our bacon, sugar and other bear dainties were hauled high over a pine limb and out of their reach. Our camp at the canyon was about 200 yards West of the great bend between the Upper and Lower falls in the timber and close to a large open park on the sloping mountain side. Our packs were scarcely thrown off when a hunter, only 2 days ahead of us from Jackson's Hole, made us a visit, and told us that a big bear had climbed into his wagon, where he and one companion were sleeping, and had abstracted and carried off a bag of elk meat, though they beat him with a club and a frying pan. About an hour later he returned with a bag containing most of the meat. He had found the "cache" where the bear had covered it, and was again happy. His prediction that the bear would follow him and make another effort was verified while it was yet light enough to see him distinctly at a distance of 10 yards. The old grizzly approached close to the wagon and camp fire, but a blow in the ribs from an ax thrown

at short range sent him off for a time, and he took a line for our camp, his coming being announced by the yells of our friends. The old rascal came up boldly within 10 feet of our camp fire, and when we threw clubs and sticks he suddenly sat on his haunches and growled. Blazing pine branches were required to drive him off.

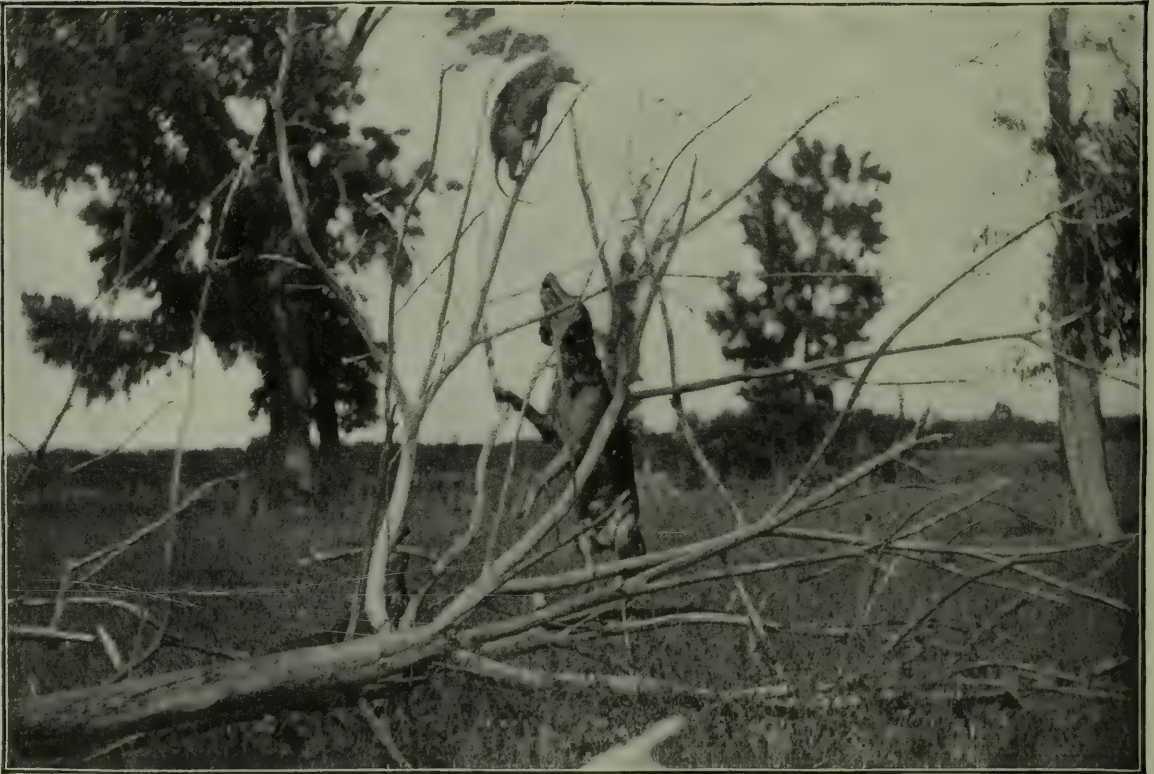
While sitting in my sleeping bag, partly undressed and engaged in transferring cut films, the camp fire nearly out, a large grizzly came up within 10 feet, determined to get into our provisions. An ax and a hatchet thrown against him, and Indian war whoops, caused a short retreat, but again we had to resort to firebrands.

These experiences were repeated all night, and we received at least 8 calls. Our sugar and bacon had been hung high, only a small quantity remaining in the hampers on the ground, and our 3 sleeping bags lay near the hampers, nearly surrounding them on 3 sides. Just before daybreak we were all aroused by the rattle of a frying pan. The time required in getting our eyes fairly open was employed in terrific yells and reaching for hunting knives and clubs. A monster bear was almost within reach of Pfohl and me, but quickly moved a few feet and we again showered missiles upon him. He seemed more willing than the others to leave, believing he had secured a good breakfast of bacon, but it turned out that he had taken 2 saddle pads stuffed with grass, which Al. had made out of a sack that had recently contained bacon. I should like a photo of his countenance when he tore open those pads. My trousers, containing my watch, were rolled and placed just back of my head, and my hat just back of them. On dressing it was found that a bear had stepped on the trousers, cracking the crystal in the watch, and had also stepped on my hat. Amateur photographers can now see the opportunities for the use of the flashlight, as well as of procuring an intimate acquaintance with all species of Rocky mountain bears.

It must be understood that all these experiences came when our rifles were sealed, soldiers were within hearing distance of a rifle shot, and there was a guard house at Mammoth Springs where we must account for a broken seal. While the gentlemanly and efficient Capt. Erwin, in command at the park, recognizes the law of self defense as in force there, he intimates that there is no law requiring people

to camp with the bears, and that hotels are provided for tourists.

Bears of all sizes and kinds right at hand, and sealed rifles! We read with renewed interest the story of Tantalus and withhold pity for him. And now when we are back at home, and in the din of the city, the superintendent publicly proclaims that there are too many bears in the park! Another small sized Tantalus.



AMATEUR PHOTO BY GUION MILLER.

A QUESTION OF SECURITY,

Winner of 15th prize in RECREATION'S 4th Annual Photo Competition. Taken with Eastman Kodak, No. 8 stop, 1-50 second.

"I told him he didn't dare kiss me," she said.

Then she added regretfully:

"I sized him up just right."—Chicago Post.

ON THE BANKS OF THE WABASH

GENE S. PORTER.

"To-morrow," quoth the Deacon, "if the day be fair, let us betake ourselves to the river." Molly Cotton executed a cake walk 3 times around the veranda, and disappeared in the direction of the pigeon loft, returning presently with a brace of fat squabs, which she said would go well with bread and butter for lunch.

When we had made all other preparations, Molly Cotton went to bed early, and the Deacon and I overhauled last year's tackle. We have long since discarded jointed rods, reels, silk lines, and patent minnows, for river fishing. We use long cane poles, stout lines and hooks; and angle worms and minnows for bait, with an occasional grub, or grasshopper caught on the bank.

It was the second week in April and earlier than we had ever gone to the river before; but on account of the wholesale slaughter of fish for years, they had become so scarce the legislature had enacted a law closing the season during breeding time, from May 1st to July 1st, after which the water would be so low and the weather so hot there would be practically no fishing, so it was a case of "now or never."

The next morning, before the rest of the world was stirring, we were off. The Deacon arranged for the horse and tackle, Molly Cotton stowed in a basket and trowel to gather roots for her wild flower bed, while I attended to the lunch, 2 cameras, a roll of hose, tripods, and a focussing cloth. I do not remember another such morning. The air was mild and balmy, the sun warm, the grass a dustless, brilliant green, and the trees just putting out their first tender, yellowish leaves. Up to the blue a skylark called over and over his piercingly sweet notes. A dozen restless, unmated birds flashed waves of scarlet and blue and brown and yellow across our paths, and rested on wayside bushes, to burst into melody. A squirrel raced us along a snake fence, and in a neighboring field a hundred lambs frolicked about their mothers.

The Deacon held his head high and pretended to drive, but the horse took the bit in his teeth and cut out his own pace. Molly Cotton sat straight as an arrow, her cheeks flushed, and her head turning from side to side, basking her soul in every delight of the day.

There is one spot, on the banks of the Wabash dearest to our hearts. About the stump of a monster maple, this hundred years, 5 or 6 suckers have grown to mighty

trees. There on the curve of a massive root, with a maple at my back and a stump for a foot rest, is my preëmpted spot. There is a second location, on the other side, that Molly Cotton claims, and the Deacon casts his bait on the waters, with great expectations and few results, from a log just beside.

The suckers bit like mad. The Deacon and Molly Cotton began filling the stringer, and occasionally when one became inextricably entangled on my hook, threatening to pull me in, I got it out, but how can I concentrate my mind on fishing, with a panorama, planned by infinity, ever shifting before me?

Twenty feet above my head a pair of happily mated orioles like rifts of sunlight darted to and fro, to their pendulous, half-built nest, with clear, sweet notes of song. A flock of bluejays, not yet disbanded, flashed by, vying with the blue of Heaven, and settled on a tall elm, with throaty chatterings. A gaudy cardinal, on a mulberry opposite us, sent over the cheerful changes of his song with many variations, "What cheer?" "What cheer?" while his modest little Quaker mate inspected a runty thorn tree on the bank with a view to housekeeping. When she had called him down and they had discussed the location, and heat, and water, and had made 4 separate trips into that same bush, my fingers itched for my camera and I began to plan for the future, too. A saucy catbird quarreled with every living thing up one bank and down the other. A bachelor brown thrush, with "intentions," sang madly for an hour, a song so exquisite that had I been a thrush lady I should have flown immediately and laid my heart at his feet. Blackbirds and crows came to drink and bathe, the sun bringing out shades of peacock green and blue on their necks; and a tanager flashed by with scarlet body and black wings. Funny little killdeers tilted up and down the bank as if on stilts. There were only 2 robins where a few years ago there were dozens, and we missed them, for a robin's rain song is a few stray notes dropped by the invisible choir. On the river was the "shinin' wedge o' wake that some muskrat was making," and the bass could scarcely keep under water except where we fished.

A little later a lost loon, evidently strayed from its flock in Northern migration, came down the river. It swam slowly and made long dives, but did not seem frightened.



AMATEUR PHOTO BY MRS. G. POTTER.

THE DEACON LANDED A MONSTER EEL.

It was larger than the common wild duck, and quite different in its markings, the black and white of its neck being especially beautiful. There was some new sight or sound every moment. Earth and air teemed with life.

"Mother!" screamed Molly Cotton, "if you won't catch those fish let some one sit there who will." I was not demented with the mania of killing things that day. As I arose the Deacon slid into my place and I heard him whisper to Molly Cotton, "Now see me haul in that big bass that's been fooling around for an hour, and make Mother green with envy." Whereat I climbed the bank and with flying fingers set up my beloved camera and focussed it on the Deacon. Then I moved off, slyly reeling out a trail of hose behind me, and called back carelessly, "I am going for a walk. Remember to stop this side RECREATION's limit."

I hid behind a tree and waited, 5 minutes, 10, 12. The Deacon's cork went under and the pole dipped; he braced his foot, his form grew rigid, and the battle began. Came to my ears Molly Cotton's strident half whisper, "Is it a bass?" And the Deacon's reply, "Must be; it pulls like a stage horse!"

I fingered the bulb and my heart beat until it hurt. Would I get it; was the hose free; would the fish come up just off the plate; or, worse still, would the Deacon get up and move out of focus? The

Deacon, with taut line, pulled and pulled. Would it never come? Just then it came. I crushed the bulb with both hands, involuntarily, and the Deacon landed a monster eel! I dropped the bulb, sat on the bank, and laughed until I was red with exertion instead of "green with envy." The next day when I brought the picture out on platinotype, I showed it to the Deacon and asked if I should label it, "Mother turns green with envy," or "Why the Deacon's bass pulled like a stage horse." His face was a study for a second, and then he burst out:

"How did you get that? Now everybody will believe any story you want to tell!"

The sun shone and the fish bit; the birds sang on and dusk came, when it was only time for noon. Molly Cotton collected the roots she coveted; the Deacon had a long string of fish; I had 3 pictures with which I am satisfied, and the memory to carry with me while mind shall last of a perfect day.

As he closed the gate to leave the woods the Deacon called, "Could you get a snake?" I could not. It was too late for snaps, and the snake with lifted head and darting tongue was not a subject for time.

"Shall I kill it?" called the Deacon, and I answered,

"No; everything has a right to live today. Let it alone."

ON REDDY'S BAR.

A Plum Lake Episode.

E. E. HICKOK.

The water shoals on Reddy's bar, yet still
it's fathoms deep;
'Tis there the giant muskalonge their
nightly revels keep.
Beneath the shade of towering plants they
lie in wait by day,
And woe unto the luckless fish that chance
to pass that way.

This morn the ground with frost was white,
and crisp and chill the air;
The lake like glassy mirror lay, a scene
of beauty rare,
With pine trees towering on the hills re-
flected on its face,
While maple, birch and poplar white lent
each an added grace.

My little boat seemed hung in space, so
clear the lake below,
Until a breeze from out the West made
rippling wavelets flow.
Two hundred feet out from my boat be-
hind me trailed my line,
And at its end a feathered lure—see how
its bright rays shine!

Hour after hour on Reddy's bar, through
grass and waving reeds,
I pulled my boat without a strike, except
from clinging weeds.
Discouraged I, but loath to leave, although
I felt I must;
So "one more turn before I start—I'll
have a strike, I trust."

Then back once more on Reddy's bar, this
now familiar ground,
Scarce had my line been straightened out,
than whizz! my reel went round.
The fight was on, but ready I and eager
for the fray,
No quarter here, no quarter there, the best
man wins the day.

My 6-foot rod of blackened steel seems
light for work like this,
But it's been tried and never yet have I
found aught amiss.

My reel of old and trusty brand, none better
ever made,
And line of "Wetaug" braided silk, of
which I'm not afraid.

A hundred feet out from my boat high in
the air there sprung
A form of full 4 feet in length, and there
an instant hung;
Then down and down and down it went,
but naught was there to mar,
For in the battle we had fought we'd
drifted off the bar.

Then up again—another break—another
dive and rush
Straight toward my boat, as if its sides in
his mad rage he'd crush.
Hard pressed was I to reel the line **and**
keep it always taut,
For should he get the least of slack **he**
never would be caught.

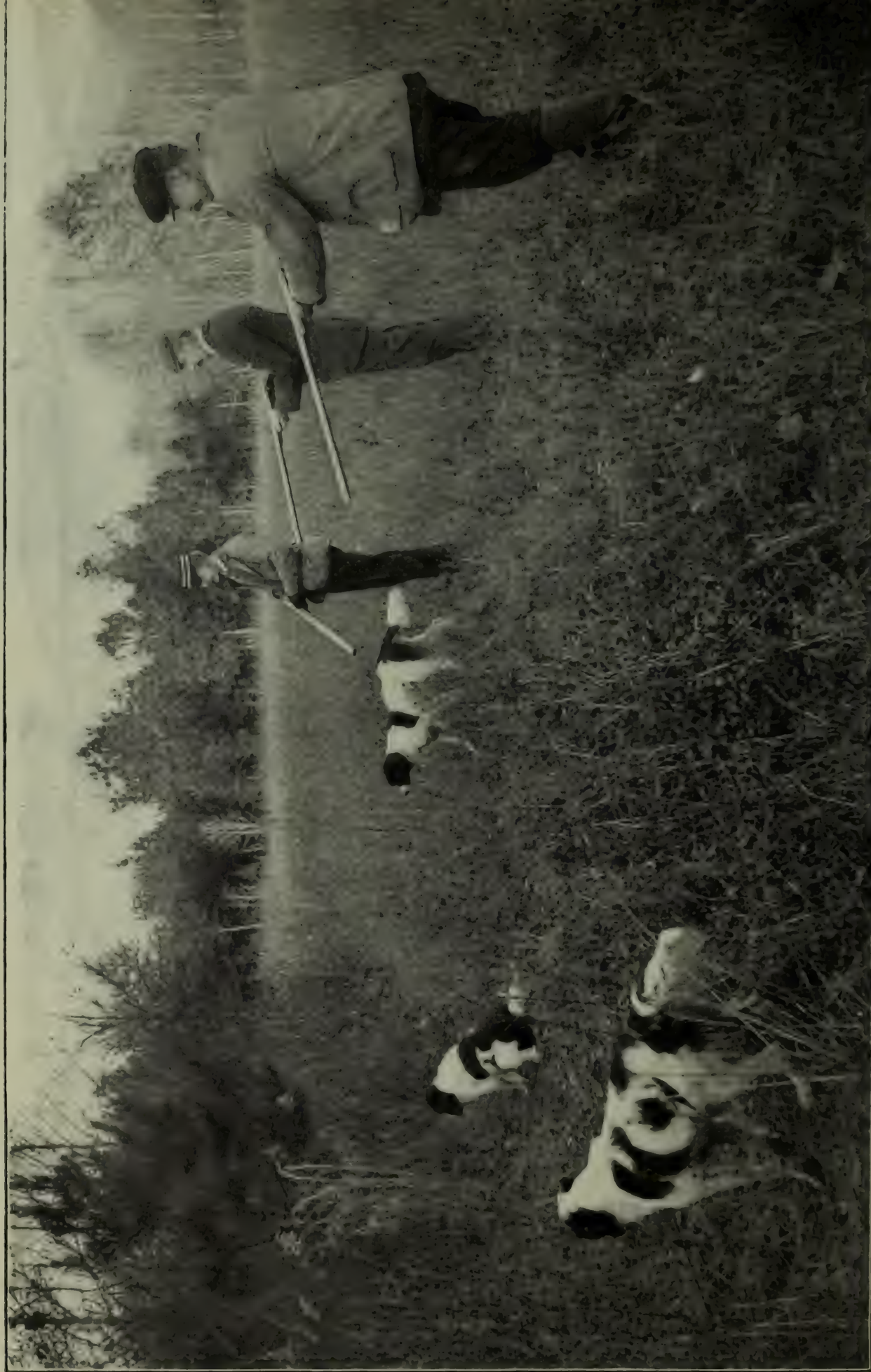
Would that I now a comrade had to **help**
me land my game,
But, ah! alas! I'm all alone! **No help;**
but all the same,
I'll see it through, and I will win, for one
thing sure I know,
Although it's hard to bring him in, it's
harder to let go.

At last he seemed to weaken some; his
rushes not so long;
And as I reeled him slowly in, he was not
near so strong;
But when I brought him toward the boat,
he took new lease of life,
And made an angry, desperate lunge, as
though renewing strife.

Full 50 feet he took that dash, then 40,
30, 10;
At last the battle's over. I brought him
in again.
With gunwale of my boat borne down, I
made a final stroke
To bring him safely over, when—confound
that hook!—it broke.

JANUARY.

Now Winter's hoary breath means biz,
And lakes and rivers freeze;
And many a man's chief pastime is
To grumble, cough, and sneeze.



SOME GOOD POINTS.

Winner of 18th prize in RECREATION'S 4th Annual Photo Competition.

WOLVES ON THE STOCK RANGE.

A. WHITEHEAD.

That wolves are steadily increasing and extending their range, in spite of every effort to exterminate or limit them, is becoming every year more apparent. In a short time the entire Western country, except the more thickly settled agricultural sections, will be overrun by them. They are not yet numerous in the country South of our latitude, but they are pouring down into Colorado from the North like the Goths and Vandals on ancient Rome.

Wolves do not so much frequent the open plains as the hilly or broken country, where they can better hide. Many may be found within 50 or 75 miles of Denver. In some sections every cow camp has one or more men called "wolfers" employed the year round, solely to keep down the wolves.

Whether due to natural ferocity or a discriminating taste, I am unable to say, but, where given a chance for a choice, they seem to prefer beef or horse meat to mutton. A full grown wolf will weigh 100 pounds or more, and it can be understood that a pack of them have no difficulty in pulling down a steer or a horse. Although tireless and bloodthirsty, they are by no means foolhardy, and seldom risk an attack unless the odds are in their favor. While they hunt mostly at night, they are not infrequently found abroad on their raids in daylight. They are identical with the Russian, or Siberian, wolf, with the blood-curdling stories of whose ferocity every schoolboy is familiar.

Although difficult to trap, they are sometimes caught by means of certain scents. They have that strange habit of paying their respects to any object projecting above the surface of the earth, so familiar to us in the case of the dog. Accordingly, if a trap is carefully concealed near a rock, root or other natural object which has been smeared with some favorite scent, they are likely to "put their foot in it."

At the meeting of the National Stock Growers' Association, recently held in Denver, and representing the large stock growing interests West of the Mississippi river, action was taken looking to the enactment of an uniform bounty law in the States and Territories seriously afflicted with wolves. Bills have been introduced in the various legislatures and committees have been appointed by the association to push them, but with what success remains to be seen.

An interesting and practical paper on this subject was read before the associa-

tion by Mr. A. J. Bothwell. I append some extracts:

"My experience with these pests covers a comparatively limited period, my ranches being in Central Wyoming, a section practically free from wolves until within a few years. They seem to have been heard of first in the more Northern section of the range country within the last decade, and their advance Southward has been gradual but certain, until now the ranges in Central Wyoming have nearly as many wolves as cattle occupying them. That this proportion of wolves to cattle has suddenly become so enormous is owing to the fact that within the past 2 years the greater part of the cattle belonging to the large range companies have been shipped from the State, the wolves remaining to prey on the smaller herds. They now pretty well cover Eastern Montana, the Dakotas, all of Eastern Wyoming as far South as the Colorado line, while they are beginning to appear in Northwest Colorado. I have not heard of any in Utah, nor have any appeared as yet on the ranges in the State of Nevada. For the information of members of this convention who reside South of the section of the country infested by these pests, we exhibit here a number of gray wolf pelts taken from animals killed within the past 60 days by employees on my ranches in Wyoming.

"In Central Wyoming my experience has been that these wolves kill from 10 to 20 per cent of the annual increase of the herds. The class of stock preyed on by them is generally calves, colts and yearlings, though occasionally a band attacks and devours older animals, and sometimes even kills full grown cattle. Wolves are generally most destructive during the spring, summer and fall months, during which period, too, they are more easily trapped, poisoned, shot or captured with the lariat. Their characteristic manner of attack is to cut off an animal from the herd, catch him by the hamstrings, and, after throwing him to the ground, proceed to devour him alive. Owing to their passion for warm, live flesh, it is difficult to kill them with poison. Caring but little for cold, dead meat, the trapper's bait is uninviting and of little use, as the wolves prefer killing their own meat.

"Yearling cattle have been observed crawling on their knees, bellowing pitiously, with a wolf hanging to each hamstring. Within the past week one of my thoroughbred calves was surrounded

by 8 wolves, and was seen on his feet and struggling after the wolves had succeeded in pulling his entrails from his body. In this instance we were successful in poisoning 6 of the band on their return to the carcass, which we filled with poison. This was the most successful killing made during the winter.

"In Russia, where the conditions existing are similar to those of our cattle ranges in Western America, after hundreds of years of warfare we find official estimates that there are still several hundred thousand wolves, and their annual damage to live stock is said to be from \$3,500,000 to \$7,250,000. The Russian government pays a reward of 10 rubles, or about \$7.50, for each wolf killed.

"If it took several centuries to exterminate wolves in the British Isles, think of the energetic and systematic effort required in the arid portions of America, where ranges exist embracing thousands of square miles that will probably never contain a single settlement. A country, too, peculiarly adapted to the natural propagation of wolves, together with their free incursions from one section of the range to another, and where no natural barrier exists for thousands of miles, from Mexico to the uppermost boundaries of the British possessions.

* * * * *

"That wolves are prolific is a well known fact, a litter containing 7 to 9 pups. It is a fact, too, that they are far more successfully exterminated during the breeding season than at any other time, either by poisoning, trapping or roping. This is because during the breeding season packs separate into pairs, burrow in the ground, and there raise their young, making it possible for the wolf hunter to

track them to their den and kill the whole family.

* * * * *

"In my section we have a bounty of \$8 supplementary to the State bounty of \$4. These, with the value of the pelt, give the hunter \$14 for each wolf killed. An examination into the history of the warfare against wolves in other countries shows that no small reward will suffice to finally exterminate the animals. This is shown in France and Russia to-day, as we have already seen, where for hundreds of years the warfare has been carried on. All attempts to exterminate wolves through spasmodic legislation or insufficient appropriation, have proved almost useless.

* * * * *

"The work of wolf extermination in a country such as the Western range section is not a matter of a few years' effort with small expense to the State, but it means a work similar to that which has confronted the Russian empire for ages. And not only will it cost the States interested vast sums of money, but the live stock interests of this section millions of dollars' worth of live stock. This warfare against wolves should be initiated now by this association, and the necessary legislation secured through its efforts. To stockmen who are indifferent to this matter because they occupy ranges thus far free from wolves, I would say that 200 miles North and Northwest of Denver there are ranges where wolves are running in packs of from 10 to 20, that they devour fully 10 per cent. of the annual calf crop on these ranges, and that to-day there are so many wolves in Wyoming it is doubtful if the State will be able to appropriate the funds necessary for their extermination."

HOW I MISSED THE PICNIC.

W. H. H.

There was to be a picnic and that's how I became disgraced. It was all the fault of the girls; but then nearly everything that ever happened to me was the fault of a girl—or 2.

I was to join the picnic at Buttermilk falls in the afternoon, and I made every effort to do so. It was about 3 o'clock when I awoke the echoes of the most picturesque spot this side of the Rockies with a vigorous "Hello, there!"

"Hello, there!" came the answer.

I said I awoke the echoes. Well, I did, literally; but I didn't discover it for an hour. By that time I had walked 4 miles, up hill, looking for the picnickers and

was mad clear through. It is inspiring to find you have been talking to an echo. You feel like using language at yourself which you ought never to use in the presence of an echo. I gave the picnic up as a large and juicy joke, on myself, and decided to visit a farmer friend at the next house. My wheel had been moored in a shed at the foot of the hill.

When I reached Knight's house the folks were cutting hay. They said it would improve my appetite to drive the rake awhile, so I drove and sweltered, got tanned, and drank copious draughts of ozone and hard cider. About 5 o'clock I started on my 3 mile ride home,

feeling like a meadow lark and looking like a peony.

My wheel was one of the attenuated pioneers with rear end propensities. At the foot of a hill a mile from the hay field I fell off. When the dust settled I discovered I was hilariously intoxicated, on an almost impassable country road, covered with a 6-inch layer of sand and dust, with 10 leagues of hill and 8 feet of backbone to ascend before I could make a graceful start. Calling on the wheel for aid I gained a pair of paralytic legs and decided to try the walking. Before I had gone far I wanted to soar, to attain a height, to fly, to flee from the arid highway which persisted in tipping up and threatened to rub its parched surface against my humid brow and pour its cosmic residue inside my collar. I attempted to scale the 8-foot backbone. Every hop brought me nearer home, but every hop brought me more dust and more sweat. I kicked up clouds of sand,

which clung to the inviting damp of my anatomy and made me feel like an emery wheel. Just as everything was right for the ascent the wheel would lurch and both feet would go into the sand with a double puff. Then I had to hop another 100 yards, swallowing dirt and cusswords, before the mechanism was in position for another try. Between swallows I sang, loud and vociferously. Thus hopping and rolling, I reached the outskirts of town. There I stacked the wheel against the fence, went through the gate and climbed aboard. There are, of course, other ways to mount, but they are sometimes unsatisfactory.

Bob Smith came into the store that night to ask why I didn't go to the picnic. It's a good thing for Bob that I was a little dejected. Otherwise it might have gone hard with him. The picnic really occurred, at another place; but Bob had forgotten to tell me of the change of plan.



AMATEUR PHOTO BY DR. J. B. PERDOE.

A BEAUTY SPOT.

Winner of 16th prize in RECREATION's 4th Annual Photo Competition.

TURKEY HUNTING.

TURKEY HUNTER.

In several articles that have appeared in RECREATION from those who report finding good sport in different sections of our country, I have noticed that while occasional success has been met in killing wild turkeys, no mention is made of how it was done. The inference may, therefore, be drawn that these sportsmen simply had the good fortune to stumble on some turkeys, get a few shots and a bird or 2 rather than that they went out with a special purpose of hunting turkeys or followed any of the methods that are usually practiced by the skillful turkey hunter.

The wild turkey is the largest as well as one of the best of the game birds to be found in the woods of America. He is a wild, wary, timid fellow, with no curiosity to lead him into danger or trouble. When he sees or hears anything unnatural or that he does not like, he just says, "Put!" and at once puts several hundred yards between himself and whatever disturbs or alarms him, usually alighting in the top of some tree where he can keep a good eye on the back track. If followed he is off again before his pursuer can get within range.

The wild turkey has a keen sense of both sight and hearing, if not also of smell. He does not go to cover like other game birds, to be marked down, trailed and stood by dogs. Take him all around he is about the hardest of game birds to find and kill, but it pays so well to get him, both on account of the skill required and the sport he affords, not to mention the satisfaction with which his merits are discussed when he is brought on the table, that I have for many years been an enthusiastic turkey hunter.

A flock of turkeys will range in their feeding over quite an extent of country. A well marked gang was once reported to me as being within a few days at points 15 miles distant from each other. When their range is more limited they can be regularly fed and trained to come within shooting distance of a blind, from which they may be killed, sometimes quite a number at one shot, when their heads are all down and they are busy picking up the corn that has been left in a row for them; but the man who slaughters turkeys in that style, or shoots them off a roost, must have a well defined strain of the game hog in his composition. A far better way to hunt them is with the assistance of a dog that has been trained to take your course, to range in front within hearing of you, to trail, flush and scatter a flock, and to give notice, by his bark, of his locality and what he has done, which can generally be verified by the surrounding sign.

Without a dog is almost necessary to know something of the lay of the country and how the birds range, in order to find your game, for they will frequently answer to a call and let you know where they are. Having located them it is far more important to get them well scattered and flying way in different directions, by rushing among them and firing wild, than it is to get only one bird and allow the others to go off together. When a flock is scattered most of them run or fly $\frac{1}{4}$ to $\frac{1}{2}$ mile away. The ordinary sportsman, after having tried in vain to trail them up with his dog, or stalk them, would probably then give up in despair and think his chance was lost; whereas the skilled turkey hunter's fun has just begun. He knows the birds will soon try to get together again near where they were flushed, and it is his business to assist the reunion in order that he may take some of its members home with him.

He selects a good location for a blind in a bunch of bushes, or a fallen tree top that is not too thick and that commands approach with clear shooting. He makes a blind about 4 feet high and sufficiently large for him and his dog to turn around in. With small, bushy limbs he fills any open places and makes a good screen, through which he can see and shoot. His dog must be trained to lie dead and shiver with excitement rather than rush out to retrieve a turkey that has been knocked over and is tumbling and fluttering within a few feet.

Having completed his blind as quietly as possible, in about an hour from the time the turkeys were flushed, he takes out his yelper and at intervals of 3 or 4 minutes begins to call, listening carefully after each call for a reply. He does not call or reply to calls too often. If possible he varies the pitch and character of his calls, as turkeys would do if there were several already answering in his neighborhood. When his bird has come well into range, he knocks him over, hitting him preferably in the head, which generally stops him right there and causes the least amount of noise and fluttering. The hunter should remain quiet in his blind, and keep his dog down. In about 20 minutes other turkeys that are probably near, not seeing anything to alarm them, will again answer a call and continue to come; for they are more easily frightened by the sight of either a man or a dog than by the report of a gun. By waiting patiently the hunter may kill as many turkeys as he likes.

Some years ago I was hunting in good turkey country, without a dog, but with a companion who knew the land well. We

located a flock about noon, that answered his call. At the first shot we killed a fine gobbler. We then broke and scattered them, made our blinds, and in about 2 hours had each killed 2 more, when, not being game hogs and having all we wanted for the table, we stopped. I found that 3 wild turkeys, aggregating about 50 pounds, were all I wanted to have hanging on my shoulders, with several miles to walk back to headquarters.

The call of a wild turkey trying to find his mates is hard to describe by a word but it is similar to—y-o-u-p—youp—youp—youp—with a rising inflection to each note. Many contrivances have been invented with which to imitate the quality of tone and the pitch of a turkey's call, but I have seen none for sale that were of any value. The one most commonly in use is the bone yelper, made from the large and small wing bones. The suction of the lips is used with this to produce the right tone. Some use this yelper with skill and success, but on a cold day when the fingers are numb and do not regulate the delivery and volume of tone well, and the lips cannot be controlled to exactly the right pucker and suction, the hunter is likely to sound a false note, which is nearly always a fatal mistake, for with their keen sense of hearing the birds are almost certain to spot that would-be turkey in the blind as a fraud and to seek another place for a family reunion. The wild turkey readily distinguishes a false from a natural call and they evidently have some code of call signals, or tone inflections, by which they come together, warn of danger and apparently talk to one another. On a recent hunt our party had scattered a flock of turkeys, the larger ones going to some big timber and the others into the brush. We made our blinds between them, and my companion, an old turkey hunter, began calling, using a bone yelper.

The birds soon began coming to us from different directions, when unfortunately he made a false note—just one little fault, but plain enough for the old hen to detect it. She flew up in a tree in plain sight, but out of range, and nearly shook her head off

with a warning call of clut-clut—clut-clut—clut-clut-clut, etc., etc. The effect was to make the other birds all circle around, out of range, and go to her. Having accomplished this feat of generalship, she flew away with the rest of her family and relations.

On another occasion I scared a flock out of a cornfield into the woods, scattering them, made my blind and began calling. In due time I had them coming, when I made one little break in tone, and the old hen began at once to call off; too late, however, that time, to save one of her brood, a well grown, fat hen that I took home with me and that, when dressed, weighed 13 pounds.

A few days previous, when out with a party, we found turkeys, and were fortunate in killing the old hen at the first shot. With the aid of my yelper 3 more fine birds were killed. The yelper used on that occasion was not a mouth yelper, but a contrivance that I have been experimenting with and trying to perfect for some time. I believe I have at last succeeded, as I imitate exactly, and to the entire approval of the most critical old hunters, every call, with inflection of tone and pitch, that the wild turkey makes, with the exception of the gobble and the whistle call, which every turkey hunter knows how to make with his lips.

I suppose that to many of your readers what I have written will be an old story, as I have no reason to believe this method of turkey hunting is confined to or followed only in this section of the country.

I think, however, it affords as much real sport as shivering on a deer stand on a frosty morning while waiting for a big buck, that usually goes out some other way, or lying in a float box watching for ducks that come only semi-occasionally.

A good, healthy jaunt through the woods in preference, for me, every time, seeking game either by signs or call. If I don't find it, there is no law to prevent my bringing back other smaller game that will be almost as acceptable on the table or for replenishing the camp larder.



AMATEUR PHOTO BY MRS. L. R. VAN HOUTEN.

A LEADING QUESTION.



AMATEUR PHOTO BY WILL J. DICK.

A DOUBLE SUBJECT.

Winner of 21st prize in RECREATION'S 4th Annual Photo Competition.

A PLEA FOR THE BIRDS.

W. H. NELSON.

A woodland path, flower-bordered, sweet,
Sheltered by high, o'erarching leaves,
Beneath whose screen, with shuttle fleet,
The Summer mystic pattern weaves.

Around me broods the silence soft,
And breath of flowers floats along,
Not even in the boughs aloft
Is heard the plaintive cushal's song.

'Tis noontide, and June's mid-sky sun
Flings earthward drowsily his rays;
The Summer day has but begun,
Yet dozes while her shuttle plays.

Crash! on the silence bursts a sound
That makes the dreamer catch her
breath.
Lo, struggling on the crimsoned ground
A creature in the throes of death!

A mother from her nestlings torn!
Hark, to her mate's despairing cries!
Alas, his life-span, too, is worn;
A second shot and he, too, dies.

* * *

The woman's heart within me throbs;
I pour wild protests on the air;
The hunter, laughing at my sobs,
Gathers his dead with tender care.

"What will the nestlings do?" I cry,
"Bereft of all that loved them here?"
How can you ruthlessly destroy
God's little ones, oh man of fear?

"Lo, yonder in their leafy home
The helpless ones will watch and call
For those that never more shall come,
Till starved they, too, at last shall fall."

"All very true," he made reply,
"But why, I pray you, grieve at that?"
'Tis strange that you should make this cry,
You wear 2 birds, now, on your hat."

* * *

Alas, my sisters, can we claim
To love our children, yet not give
To other mother-hearts the same
Right for their little ones to live?

Now comes the maiden down the aisle,
Upon her face behold a winsome smaisle
Full of glee;
For she knows her new fall taisle
Will raise the other maidens' bailsle
And she'll be envied for awhaisle.
Don't you see?—Chicago News.

A TRIAL AT THE GEESE.

J. H. V. BACHE.

Leaving New York by steamer, Ernest and I arrived in due time at a quaint little town on the shore of Prince Edward Island. We had had rare sport there, in former days, with the trout, but now the season was closed. Cold weather was coming and so were the geese, on their annual flight Southward.

Packing our guns and outfit into a small yacht, late one afternoon, we set sail. Night found us housed in a snug little shooting shanty on one of the small islands in Richmond bay. After a hurried breakfast of flapjacks and bacon the next morning, we were soon on the march and were barely settled in our stands when the distant honking of geese told us the game was on. The half light of the breaking day showed us a long flight of birds coming our way, but a little to Southward. On they came, increasing in size every moment, but if they continued in their course they would be out of range. Suddenly from my left, where Ernest was concealed, rose a perfect honk, swelling with appealing force.

"Honk-a-wunk-onk-onk!"

Back from the flock came the ringing reply,

"Ho-unk!"

Then they swerved and headed directly over our blinds. I lay perfectly flat, not daring to move, and strained my ears to catch the sound of wings. I didn't have to wait long. With a thrill of joy I leaped to my feet and let go both barrels. Two big geese came tumbling down and struck the water with a splash. Ernest had scored also. The geese were quickly recovered and propped up for decoys. We hastened back to our blinds as soon as possible and had just picked up our guns when another flock swung by Ernest.

Bang! bang! roared his big ro. One goose turned a complete somersault and

gave up the ghost. Another was dropped at extremely long range, and as the morning wore on we watched unceasingly all around us, calling whenever the geese came in sight.

Sometimes they came by singles, sometimes by pairs, and then a flock would sweep by, affording a fair mark, that would occasionally result in a clean miss, with no excuse for it. The main flight had about ceased and we had 8 geese to our credit, when, as we were leaving, the honking of more geese in the distance filled us with an uncontrollable desire for one more shot. A flock of perhaps 30 suddenly appeared over a little hill to the Southward in 3 separate bunches. They flew rather high and directly overhead. I emptied both barrels at them as they passed, with apparently no effect until they had gone possibly 100 yards. Then one began to fall and gradually settled down, nearly $\frac{1}{2}$ a mile away. Noting its position we recovered it on the way back to our boat. Six more geese appeared, and passed in a line about 60 yards from our blinds. I had all I wanted, so did not molest them, but as the result of a second barrel from Ernest one goose kinked its neck, but did not fall. This is usually the sign of a severe wound, so we watched closely. It settled gradually and then tumbled headlong to the ground, not more than 300 yards away. It was dead when picked up, having bled freely from a wound in the neck from one large shot, the only one that had struck it.

The sun was high and a fair wind was blowing to take us home, so we were not long in boarding our yacht, with 10 fine specimens of the Canadian bird. Roast wild goose formed a tempting meal for several of our friends in the village that week.

CAMP SONG.

HALE HOWARD RICHARDSON.

Good night, Old Sun! We'll stay a little longer

To greet the Moon just rising o'er the hill;

Far in the East the Night is growing stronger,

While at thy heels the Day is smiling still.

O Queenly Orb! Clothed in thy fullest splendor,

In thy dear light, we'll sing a little while.

But to thyself would greater homage render

In restful slumber 'neath thy gracious smile.

Good night, Dark Wood! Thy denizens unnumbered

Have to the Sun their thankful carols made,

While hosts of Night that thro' the day have slumbered

Now wing unhindered on some gruesome raid.

Good night, Sweet Stream! Thy melody is ringing

With softest cadence thro' the Forest aisles,

Borne on a breeze with balmy odors clinging,

And rest and beauty ev'ry heart beguiles.
Good night! To all, Good night!



AMATEUR PHOTO BY O. C. MURRAY.

HUNTING BOB WHITE IN MISSISSIPPI.

Winner of 14th prize in RECREATION'S 4th Annual Photo Competition.

A DAY WITH THE DUCKS.

PHILIP C. LOCKE

"Come up to-morrow for some duck shooting." This invitation I received from Tom Alexander on August 30th, 1899. Noon of Thursday, the 31st, saw me at Manitou with gun, shells, etc. In 2 hours Tom and I were on the way to Grassy lake, 16 miles North of Manitou. There the Manitou Gun Club had a hunting lodge. We were but the forerunners of a party of 13, and our duck shooting was to begin September 1st.

We reached the lodge about half past 4 and the others of the party arrived in 15 minutes.

When the lodge was cleaned we had a nice hot supper of soup, stewed chicken, bought from a neighboring farm house, boiled rabbit, apple pie, cake and tea. At 10 all hands turned in and at 5 the next morning we set out. I got a good position and loaded up. Soon a teal came along and I scored a clean miss. Shot behind him! Up and down the river I heard the fire of the 12. We had stationed ourselves at distances of 50 to 75 yards, and

the ducks had to run the gauntlet of our guns.

Three big mallards came my way, about 40 yards off. To the report of the 12 bore one pitched headlong into the water, badly winged. Soon the birds came thick and fast.

"Take that one!" yelled the man next to me. "I have wounded him."

I got a fine overhead shot at the duck and down he came, a big black fellow. Then 2 came straight over my head, about 35 yards up, and I knocked one down. After killing 2 more, Sanders and I went up the river to where it joins the lake. I had some fair shooting there, and got 3 more ducks, making 9 for that morning's work.

When we returned to camp about 10 o'clock and emptied our game bags we had 150 birds among the 12 of us. There were mallards, teal, spoon-bills, grays, blacks, a few redheads, and some canvasbacks. We kept out 25 for dinner and supper and sent the others to our friends in Manitou.

The subordinate dashed up to the Filipino commander.

"General, the marines are landing from the enemy's ships!"

"All right," responded his commander, as he peeled a banana, "get ready to pepper the salts."—Chicago News.

AN AFTERNOON IN THE WOODS.

J. L. OSTRANDER.

One Saturday afternoon in October, 1897, I was attacked by that feeling which periodically seizes me and gets steadily worse until I take several doses of smokeless powder and chilled shot. To effect a cure I took down my little Remington, 12 bore, $7\frac{3}{4}$ pounds hammer shot gun, and after putting a few number 8 shells in my pocket, I started out. My objective point was a little ravine, where I had seen a ruffed grouse a few days before. Ten minutes' walk took me to the woods, with our own incomparable Hudson river on one side, the Catskill mountains on the other, and the Berkshires away off to the East.

I struck into the woods and soon reached the little ravine, $\frac{1}{4}$ of a mile distant. As I rounded a clump of hemlock, out dashed my friend of a few days previous, on the opposite side. I had only a glimpse of him, but as he went hustling along I sent a charge of number 8 at him through the trees, and scored a miss. Dropping on the ground and looking under the boughs I saw him about 100 yards off, going straight ahead. I thought he would go right on until he reached a brush lot at the other end of the ravine. Just as I arrived at the place where I had last seen him, there was a roar and a whirlwind of leaves not 10 yards to my left. A second more and the grouse was above the brakes and ferns and 20 yards away. Then I pulled the trigger on him. I had never used a shot spreader on game before, but from a target previously made I knew if I had missed it was the fault of the man behind the gun. When I shot I had a full view of the grouse, but he was just going into a little bunch of hemlocks and I didn't see him after the report. When I reached the spot where he had disappeared, I found him lying on the ground, almost at my feet, and I rejoiced in a clean kill. He was my first bird of the season, and as I looked him over, with scarcely a feather ruffled, thanks to the shot spreader, I thought I had never seen a finer specimen of our king of game birds. How much more satisfaction there is in getting one such bird than in killing a whole brood of half-grown, scrawny little things.

I then hunted through the brush lot thoroughly but found no more grouse, so I started for another piece of woods about $\frac{1}{2}$ mile away. As soon as I entered

the brush, I flushed a bird, but being tangled up in wild grape vines and briers I had to let him go without a salute. My only satisfaction was in following him. I had not gone far when another big fellow rose off to my left, about 20 yards away. Bang! Still going. Bang! again. Going still, at an increased speed. But I was determined to have either that fellow or something akin to him, so up the hill I climbed, and after taking a rest I started once more. Pushing through a jungle which was first cousin to any Africa ever produced, I came out on an ideal spot. Grand old hemlocks towered on all sides. It was hard ground to hunt over. Hills and hollows seemed to grow without the shadow of an excuse. I traveled along one of these ridges until I reached a particularly promising spot, and then descended into a little hollow, when that pleasant prelude that grows to a roar sounded just below me. In an instant the source of it was 40 or 50 yards away from me and traveling like a cross between greased lightning and thought. The little gun spoke to him, however, and in obedience to its command, he stopped. The powder and the shot were all right that time, and I was as pleased as a lamb with 2 mothers.

After getting a drink from a neighboring spring, I started out again; but although I flushed another bird I failed to get a shot as I had only a glimpse of him a long way off. Forty yards farther I scored another miss.

It was then time to go home, so I took in the little swamp which adjoined the brush lot, as it was in a direct line between me and supper; but although I hunted it faithfully I did not see a sign of hair or feathers until I was about to give up, when 3 birds rose almost at the same time. Bang! went the first barrel, but the old fellow had business elsewhere and did not stop. Behind him was his brother and at the second report he decided to stay with me. I then had 3 grouse, which I considered enough. Even though I had not taken home a bird I should have enjoyed the trip.

A man who can find no pleasure in hunting, other than that derived from the number of birds he gets, should be prohibited by law from carrying a gun.



BY KIND PERMISSION OF THE SAN FRANCISCO CALL.

TWO BIRDLESS HATS.

The plumage of a dozen birds would not have made them more beautiful.

OLD AND NEW GUNS.

A. M. BOWMAN.

A hunter had a gun,
A very ancient one,
And he shot with it many a deer and bear;
Then he got a new gun,
A very modern one,
And now the ancient gun gets no more
care.

But in the years to come
There'll be a newer gun,
A new gun that will shoot a pinhead ball;
And then the ancient gun
And this now modern one
Will be hanging side by side on the wall.

A BEGINNING ON QUAILS.

J. A. MACKENZIE.

Well do I remember the first time I tried to bring the swift-flying quail to bag. I chose a raw, windy day in November and had an extremely swift lot of birds, such as I have not met since. My pointer, Vic, and I took our stand in a buckwheat field and the old dog ranged back and forth over the buckwheat without finding any game. Finally she made a dash into a clump of yellow top, wormed her way in and out among a dense growth of briers, slackened her pace and drew up cautiously to a pretty point at the edge of a brush heap. A fence was between us and I was afraid to climb for fear the birds would flush, so I ordered her to put them up. In she sprang and the birds went like so many rockets. Remembering to hold ahead I brought up the gun and fired, but not a feather fell to gladden the heart of the novice. I was dumbfounded. Two birds at least ought to have stayed with me; but life is full of mysteries.

I reloaded, and hunted up the scattered birds among some lodged buckwheat in a far corner of the field, where they had taken refuge. Vic soon found one and pointed it magnificently, her slim body curved in a semicircle while her liver and white head, stretched to the full extent of her long neck, indicated the whereabouts of the quails. I moved cautiously up. The bird burst from the tuft of buckwheat like a cannon ball and went down wind at a speed which threatened to start the feathers from their sockets. In my excitement I snapped at it, but the bird must have flown faster than my shot, for the last I saw of it was a gray streak disappearing over a neighboring fence.

The wind blew and the birds and shot flew, but, sad to say, without colliding. The dog pointed them faithfully and I missed them accurately. Thoroughly disgusted with my shooting I called in the dog and followed the birds into a big, open wood of maple and elm. Vic there displayed her wide ranging qualities, but always came in at 2 blows of the whistle. While on a long cast of 150 yards or more to my left she suddenly turned, drew up to a brush heap and pointed. She held her point, as staunch as a rock, until I arrived

and deliberately picked the birds out of the brush. They shot out as swift as ever, with the accustomed whirr of wings, so musical to the ear of the sportsman. Profiting by my previous poor success, I carefully covered the bird before pulling the trigger and had the satisfaction of seeing it pitch headlong to the ground beside a stump some 30 yards away. At last I was jubilant. The feathers on the bird were carefully smoothed down and it was placed head first in a little cone of paper, which was then stowed away in the roomiest part of the game bag. Vic was called in and patted and sent to work again. She found 2 birds in a fence corner, which flushed wild and took to the trees. I marked one in the crotch of a big maple, from which he came down in response to a load of number 7's. By that time the birds were thoroughly dispersed, so failing to find any more we went home, fully resolved to try our luck again the first opportunity.

Later in the fall, I got 12 quails one day out of a similar bevy, but the wind was not blowing so hard and I had learned a thing or two; namely, that snap shooting does not pay so well as deliberate but quick aiming on quails, and that in leading a crossing bird allowance must be made for the time it takes to bring the gun to the shoulder, as well as for the time it takes the shot to reach or swing with the bird. In all that season's shooting I was seriously handicapped by a full choked gun. I consider a gun bored right barrel cylinder and left full choke the best for all around shooting in these parts. The right barrel gets in at the rise and then there is time for the left. Besides, long shots can frequently be made at quails, grouse, hawks or ducks that could not be killed with 2 cylinders. My experience has been that a modified choke is less regular in pattern than either a cylinder or a full choke, a slight difference in wadding, crimp or charge making a great difference in the pattern, both as to closeness and evenness. My old gun always gave the best pattern with 3 drams of powder, black or nitro, and one ounce of number 6 shot.

Any smoker who really wishes to quit the habit can do so by knocking the live ashes of his pipe into a keg of blasting powder.



THAT POOR COON.

AMATEUR PHOTO BY DR. F. D. HULBURT

Winner of 13th prize in RECREATION'S 4th Annual Photo Competition.



OUT OF RANGE.

AMATEUR PHOTO BY FRANK E. FOSTER.

Winner of 20th prize in RECREATION'S 4th Annual Photo Competition.

A SQUIRREL HUNT IN WEST VIRGINIA.

THOMAS H. HUDSON.

At 4 o'clock the farmer's wife called us to breakfast. My brother Will and I were spending a week at a farm house in West Virginia, hunting and fishing. As soon as a hearty breakfast was eaten, we were off for the woods, not more than $\frac{1}{2}$ mile distant. Will decided to try his luck at the right of the road, while I took the woods on the left. It was the first week of September, hickory nuts were plentiful, the squirrels were cutting, and we knew we could kill all we wanted.

Day was just breaking when I climbed the fence along the woods. It was a perfect morning for squirrels. Soon I heard a nut drop and saw a squirrel.

I got within good shooting distance where I could see the cuttings fall and the branches shake as a squirrel would rush out after a nut; but they all seemed to be on the opposite side of the tree. Finally, as one reached out his fore paws for a nut, I fired. Down he came, dead before he struck the ground.

In a little while I had 2 more shots, and 2 more squirrels on the ground. As soon as I was sure there were no more on the tree I picked up those I had and started on. I was seemingly as noiseless as a cat, but somehow a squirrel heard me and began to bark. Others took it up and for a while the woods resounded. I waited until the barking stopped. Then I started for the nearest squirrel but he saw me and was off before I could get a shot.

I went a little farther and killed one cutting acorns. I could hear the squirrels making a terrible noise on a hickory standing at the head of a small hollow. I was on the lower side of the tree and they looked no larger than chipmunks. As I stood

there watching, one came down the tree with a nut in his mouth, jumped off on a small sapling and began to finish his breakfast. In a remarkably short time the nut was cleaned, the shell cut open with those sharp front teeth and the kernel eaten. Almost before I knew it the squirrel was half way up the hickory again. I had waited long enough. Before the report of the gun had died away he was on the ground as dead as a mackerel. Three more shots and 3 more squirrels came tumbling through branches. In a few minutes I saw a squirrel coming up an old rail fence on the top of the hill. He was a long distance away so I patiently waited for him to get nearer; but that squirrel wasn't doomed to die that day. Just as I was thinking of stopping him he jumped off on the other side of the fence and took down through the woods at a 2 minute gait. The next one I killed in a small hickory that stood at the edge of a second piece of woods. A little farther on I heard the cuttings falling at a great rate. I was almost at the tree from which the sound came, when a grouse, startled by the slight noise I made, burst through the woods and was gone like a flash. The squirrels heard the noise and scampered wildly off from that tree. I got under the tree and let them have it. I emptied my gun and got 2 without any trouble, but before I could load again they were all out of sight.

I felt perfectly satisfied to quit then. When I got out of the woods I called Will. He had bagged 9. We soon reached the farm house as hungry as bears, but the dinner we got made us feel ready for another hunt the next day.



A FUTURE FAMILY OF QUAILS.

A TRIP TO THE MAINE WOODS.

F. M. SPIEGLE.

Our little family party had been at Rangeley lake only 2 hours; in fact, just long enough to be shown to our airy rooms overlooking the most beautiful sheet of water I had ever seen. We had changed our dusty clothes, when decided symptoms of the fishing fever took possession of me. I had often read of the wonderful Rangeley lake region and of the enormous trout that abound in those waters, and had been told by my friends of their personal experiences at that place and of their remarkable catches; but an old angler always takes fish stories with a great deal of salt. I had my rod with me, but had not much hope of being able to use it, as our stay at the Rangeley region was to be short and was not intended for a fishing trip. But when one is longing to cast a fly he may be forgiven for yielding to his inclinations. So it came to pass that by the following morning, bright and early, I was seated on an old buckboard with Martin Fuller for guide, rattling away for Kennebago camp. Fuller is one of the best guides I ever employed. He proposed the Kennebago lake trip in order that I might see as much of the country as possible, besides securing a good mess of trout. I will never forget that drive. Some people might have called it tiresome, but to me the excitement of riding over boulders 3 feet high and through forests that had never been molested by lumbermen was delightful.

My companion told me the Rangeley lake region was named for an Englishman who settled there some 50 years ago and founded the village of Rangeley. Fuller said that even in those days wealthy men traveled many miles to visit that section to catch trout and kill big game. Although the region has been known so many years there are comparatively few visiting it to-day. This seems strange as it is a perfect Paradise for sportsmen and through the well conducted guide system the most remote and isolated lakes and ponds are reached with ease.

We had driven about 2 miles when Fuller pointed out to me the White mountains of New Hampshire, 80 miles away. A grander view I had never seen. The soft, fleecy clouds which had been gathering all morning lay in great masses through the numerous valleys, casting fairy-like shadows below and, like immense curtains, lifting occasionally with the wind, unveiling some grand old peak we had not seen before.

About 10 o'clock we arrived at Loon Lake camp, which marked half way between Rangeley and our destination. After a hearty handshake with old Captain York, the proprietor, a glimpse of the lake and a welcome invitation to dine with him on our return, we again went on our way, bumpity bump, for Kennebago, arriving at that camp about noon, too eager for sport to take time for dinner at the camp. We hurriedly unhitched, stabled our horse and lost no time in preparing ourselves for the fun.

Kennebago is the favorite entrance for hunting parties starting out for big game in the Maine wilderness. The camps consist of several well built log cabins, where a sportsman may remain any length of time and receive the best of care for a comparatively small amount of money. I would not advise a society man to take his family there for the summer, as I am afraid those inclined to gayety would be disappointed. The proprietor is a big, brawny mountaineer, who is ever ready to do all he can for the pleasure and comfort of his guests. I am told by trustworthy patrons that his cooking cannot be excelled. The interior of the cabin is adorned with mounted heads of moose, deer and caribou, which have been killed in the vicinity.

Lake Kennebago, only 100 feet away, is one of the grandest sheets of water in the State, is 7 miles long and will average about a mile wide. The water is as clear as crystal and is the home of monster trout and salmon that are ever ready to snap at the slightest suggestion of a fly. The lake is surrounded by forests of spruce and balsam so dense it is almost impossible to penetrate them any distance. Most of the traveling is done by canoe through the numerous lakes and streams, with only short carries now and then. About a mile below the foot of the lake are the Kennebago falls, which are noted for their beauty. Up the stream 3 miles is a picturesque lake, about a mile long, which is appropriately called "The Fly Fisherman's Ideal." On its shores deer can be seen at almost any time. Up this stream and across the waters of Little Kennebago lie, in far away solitude, the Seven ponds. There the sportsman can find unlimited fishing and hunting, besides seeing some marvelous work of beavers.

Comfortably seated in a canoe which Fuller skillfully paddled just close enough to shore to allow me to cast my flies towards a likely home of a thoughtless trout,



I HAD STRAINED TOO HARD ON MY PET ROD AND HAD SNAPPED IT AT THE FIRST JOINT.

my first cast, after getting about 30 feet of line out, was a success. I hooked a young salmon and what a fight he gave me! I was, like all lovers of the sport, a little too anxious to get him in the boat, but fortunately I had him well hooked, and after experiencing all the exhilarating feelings that have been described so many times my

prize lay at my feet, glistening like silver in the bright sunlight. My guide, much to my surprise, was highly amused at my delight in landing what I thought a great prize. After I had made 4 or 5 unsuccessful casts he suggested that it was rather slow fishing and that we would better give up Kennebago and go over the ridge to



ONE OF THE THIRTEEN.

Flat Iron pond. We pulled the canoe safe on shore and a short walk over a carry of about half a mile brought us to the pond, which is appropriately named on account of its resemblance in shape to a common flatiron.

We boarded a little canoe which my guide had at some previous time carefully stowed away behind some thick balsams, and moved slowly through the lily pads toward the middle of the lake. Fuller cautioned me not to risk making a cast until we cleared the lilies, as I would be sure to get a strike and have my line, leader and flies tangled up as they never were before. The prospect of surely getting a strike made it impossible for me to resist, and besides my pride of skill in handling a rod would not let me admit any trout could tangle me up in lily pads, were they ever so thick. Seeing a little opening ahead I told Fuller to lay to and I would show him how a York State angler could cast. I

had on my line a 6-foot leader and 3 dingy colored flies that were made by my guide for use in that particular pond. They had no sooner struck the water than as if by magic it seemed alive with trout, all darting in the direction of my luring bait, leaving arrow-like wakes behind. If you have ever seen fish being fed in a hatchery, making the water boil with their silvery fins in their endeavors to see which can get his breakfast first, you can form some idea of what I saw at Flat Iron pond. The ravenous rascals rushed in from every side, making the lily pads wave with their wakes. In an instant I was pulling and tugging, with my 6-ounce rod bent almost double, trying to land not one or 2, but 3 at once. One I had hooked in the side fin. With the assistance of the other 2 he had my line so snarled and tangled about the lower lily stalks that I was completely unnerved. Not only was my line rendered useless through the excitement, but to my

dismay I had strained too hard on my pet rod and snapped it at the first joint. I must confess I was glad I was in the wilds of Maine where I could give vent to my true feelings. Fuller, whom I had not noticed during the excitement, was, to my utter disgust, lying back in the boat laughing as if he might at any moment burst a blood vessel and muttering something about York State anglers.

After I had informed that weatherbeaten individual I had not come all the way from New York for the purpose of amusing Maine guides and being eaten alive by black flies, we paddled on toward the middle of the pond, where he squared himself in my estimation by handing me his rod and telling me I would be able to catch all the trout I wanted. I believe I could have caught a bushel if my conscience had not troubled me. As it was I stopped when I had secured 50 that averaged $\frac{3}{4}$ of a pound apiece.

While out on the pond we counted 13

deer, at different times, feeding along the shore. I regret not having had a camera with me as we had many opportunities of securing good negatives. As it was I had to satisfy myself with a few rough sketches and the hope that next year would see me in the same place.

Just before leaving we saw an immense Canadian lynx that was evidently, from his crouching position, making ready to spring on some luckless deer. Fortunately for the deer, on seeing us the lynx bounded through the dense forest for parts unknown. Both Fuller and I longed for our rifles which we had foolishly left at home.

Our walk back to Kennebago over the carry was a delightful one. Although it was July, the air was cool and crisp and at every turn of the winding path some gorgeous view presented itself. A drive through the grand old forest, in the long twilight, to Loon Lake camp, and a hearty meal with Captain York ended my first trip to the Maine woods.



AMATEUR PHOTO BY FRED'K R. WOODWARD.

A CRACK SHOT.

Winner of 23d prize in RECREATION's 4th Annual Photo Competition.

CAMP FIRE STORIES.

CAZADOR.

Our party had been out in the mountains doing Government surveying, and were lying off taking a rest waiting the return of our chief from San Francisco. Our camp was by the side of a trout brook from which we drew a good portion of our rations. After supper we sat around our camp fire to smoke our pipes and spin yarns until it was time to turn in for the night. Turning to one of our number who was axman for the party, and a droll backwoodsman from the frontier of Missouri, I asked him: "Alick, how comes it you never married, when girls were as plenty in Missouri as you declare?"

Looking up after a moment he replied, "I did come mighty nigh it once, when I was a young fellow."

"Tell us about it, Alick, while we smoke our pipes," was the cry.

Urged in this way, he at last reluctantly began: "Well, you see, back thar, us boys never knowed what it was to have store or boughten clothes until we were almost growed up, and allers went barefoot. We just wore long home-made tow shirts that come half-way below the knees and tied around the waist with a strop. Well, as I was a-sayin', Sal Armstrong, a neighbor gal of ourn, lived on t'other side of the clearin', acrost the field from us, and a right peart gal she was, if I do say it. I thought a heap of Sal, and used to go over thar and set on t'other side of the chimbley from her, and jist set and look, and she'd look back at me, 'til the old folks went to bed. Then I'd light out for home, just to go over the same performance next night.

"Well, one night I plucked up courage, and when the old man went out for a stick of wood and the old woman was a-huntin' a fresh taller dip, I jist reached in with my toe and raked out a chunk from the fire. Takin' it up in my hand I says to her 'Sal, do you know what I've a mind to do to you?'

"'No, Alick,' says she.

"'Why,' says I, 'I've a mind to burn you with this here chunk.'

"'What fur, Alick?' says she.

"'Cause you are so dogon pooty,' says I.

"Well, boys, I was so skeered at poppin' the question to her that I jist lit out fur home and never went back for a week. Howsumever, I plucked up and went over one evenin' airly, jist afore sundown, and steppin' up on the doorlog, I looks in, when, hell's blazes! thar sot a fellow all dressed

out in store clothes, biled shirt an' collar an' all, jist settin' up as close as he could git to Sal, and a-laughin' and goin' on, and Sal a-jinin' in. Well, I just stood thar a-wishin' he'd come out, so I could lick blazes outen him.

"After standin' thar a good spell, Sal says, 'Come in, Alick.' I was too mad to answer, but jist stood thar lookin' in at 'em; and by and by I seen them a-lookin' at me and a-laughin' like to split. 'I'd make you laugh, you dogon purp,' thinks I to myself, 'ef I jist had you outside here awhile.' But they kep' on laughin' and pintin' at me, when on all on a suddint I felt cold like behind, and turnin' around, if thar wasn't a yearlin' calf a-chawin' the hind end of my tow shirt off, jist a-rollin' of it in like an old cow rollin' in a cud of clover. I just slapped my hands behind me and lit out backward fur home, and never went back thar agin. I'd a-been a-standing thar yit a-waitin' fur that feller to come out, I reckon, ef it hadn't been fur that dogon yearlin'."

After the laughter at the recital of Alick's story had subsided, Col. Fred remarked; "By the way, Alick, I believe you used to work for old Uncle Zac H. down in Green Valley, didn't you? And built that fence around his oat field?"

"Yes," said Alick. "Me and Billy Ables built that there fence and split out the pickets right thar' along the branch."

"Well," said Col. Fred, "the way you fellows built that fence furnished me lots of fun one day," and then he told this story:

"Among the 'pathfinders' of early days was old 'Uncle Zac,' as he was familiarly called by all who knew him. Coming to the Coast in the early forties, and taking up a fine tract of bottom land, he gave up trapping in the Rockies, and settled down to the life of a ranchero. Genial in nature, and hospitable to a fault, his latch string hung on the outside, and he took it as a real offense if his neighbors didn't come around as often as he thought they should.

"Living near him, I became a frequent visitor. One Sunday morning, I rode over to spend the day. Not seeing him on my arrival and being told that he had gone down the branch, I started out in search of him. I had not gone far when I saw him sitting on a log laughing while tears were running down his cheeks. He saw me approaching, and held up his hand to enjoin caution.

"What's up, Uncle Zac?" said I, as I took a seat beside him.

"Well," said he, "my shoats have been getting into my oatfields, and we could not make out where the hole was until yesterday, when I found that old hollow log with an elbow crook in it; the boys were too lazy to cut it out of the way, so built the fence over it and the shoats got into the field through the hollow log. Last evening I thought I would have some fun. I called the boys and moved the log, so that both ends are on the outside of the field. I came down here just now to see the fun. Hush, here they

come again.' Along the fence came the shoats, with snouts to the ground and tails curled, at a fast trot; when they reached the end of the log, where they had been accustomed to enter the field, they stopped for a moment, then entered one after the other; out they came at the other end of the log, looked bewildered and puzzled and started back, squealing, to repeat the act over and over again.

"We watched the fun until our sides ached from laughing and then went back to the ranch to liquor up."

THE ELK AND THE SETTER.

BOONE.

The April sun had melted the snow from the Southern side of a ridge in the Blue mountains of Oregon, but on the Northern side and in the gorge it still lay 2 to 4 feet deep. Deer had not yet come up from their wintering on the plains, and elk had already left this winter retreat for the higher mountains. I hardly expected to find game, but we needed meat at the cabin, and I hoped I might stumble on game of some kind. Along the ridge were indications that elk had wintered there, but in the thawing snow the sign might be a day old or a month, for all I could tell. I came to a stretch of shale 100 yards across, perfectly level and free from plant growth. There my Irish setter, Dash, drew past me, raised his nose in the air, and went slowly and firmly forward. He had never deceived me and, though I could see nothing, I knew he would not now. I was hunting by his nose, not by my eyes. Here is where a setter makes us even with elk or deer; we have eye and ear equal to theirs, but they have also a nose—worth both the others. The setter has as good a nose as they, and with his help we are even. Trust it fully, fellow hunter; it will never fail you. You need not thread thickets nor wade marshes; give the setter the wind and go around them, he will do the rest. So, like a good Christian, I walked on by faith, and not by sight. This time my faith was well placed. The dog drew on; not nosing the ground but with head erect—for he is of noble blood. Every step was measured and firm, with no thought even of me; for him the universe lay in that tainted air. The shale crossed, the thickly wooded brink of a vast canyon followed, and there the dog stopped, motionless as a stone. An unversed man might have said, "Sage hen, blue grouse, perhaps." But this man was versed, and he said to himself, "Deer, certain; a forerunner from the plains below." Did Dash see it? Of course

not, no more than he sees grouse in the grass or quail in the thicket. Seeing was not his forte: scenting was. I stepped cautiously forward, and looked over the brush covered slope of the canyon. Down at the left, 100 yards, I saw, just past a clump of mahogany, a great, round, yellow ham. I need not tell any mountain man that there is only one yellow thing in the mountains, the sides and ham of an elk. He was lying down, and no other part of him could be seen. What was to be done? To fire into that ham was to spoil 50 pounds of the best meat in Oregon; and I was after meat! Even then he might get away. My only chance was to shoot low on the hip and break the leg. I had a .45-100-405, Sharp's shell in my rifle and I knew what it could do. I fired, and the great creature sprang upon 3 legs, the other dangling with a shattered bone. I heard him clattering up a small hill while I worked in another cartridge. Looking up I saw, on top of the hill 50 yards away, my elk, with another of equal size beside him. I gave the newcomer a shot through the shoulder. He wheeled past me, I fired at his other shoulder, and down he went. A shot through the neck dropped the other elk 20 feet from him. I had secured 2 of the noblest animals in the mountains, and at least 600 pounds of meat.

Dash all this while stood firm and unmoved as when he first made his point. That was his work until told to fetch. Not to disappoint him, I gave the word. When I got down the hill, he had chewed the hair from the back of the first elk trying to get a hold and fetch it to me. He was bent on doing his duty, regardless of the size of our game.

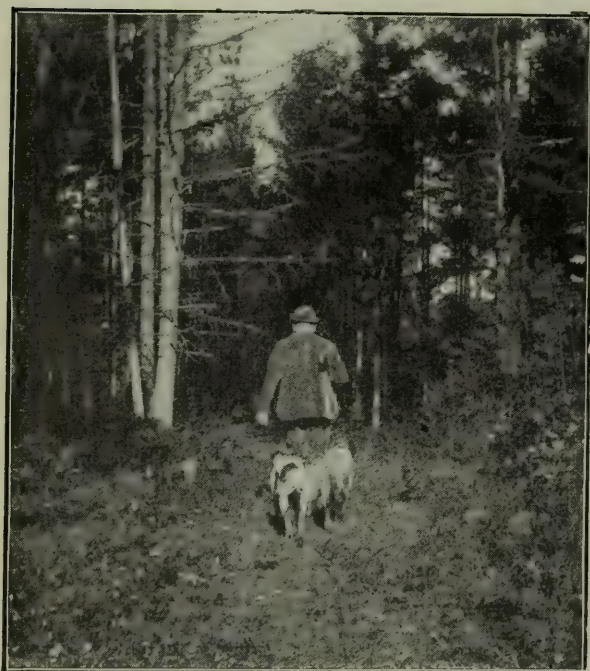
Dash was sent me by Hon. W. Y. Ripley, of Rutland, Vt. I have often wished that gentleman could have stood by me on the prairie or in the mountains to watch the work of his beautiful gift.



AMATEUR PHOTO BY C. G. MOORE.

A RIGHT BEGINNING.

Winner of 17th prize in RECREATION'S 4th Annual Photo Competition.



AMATEUR PHOTO BY W. C. B. MERRIAM.

RETURNING FROM THE HUNT.

Eastman Bullet Film Camera. Universal lens, wide open; snap shot.

"RETURNING FROM THE HUNT."

WM. C. B. MERRIAM.

The accompanying photo shows probably the finest brace of dogs that "ever went anywhere together." Blake's Rod, son of Roderigo, is the setter at the right

and Champion Dustaway, son of Stridaway, the pointer on the left of the picture.

We had been skittering for pickerel in Greene's basin, Lake Winnepesaukee, and after fishing 2 or 3 hours I suggested to the doctor that I go on shore, build a fire and get things ready for dinner. It was while gathering firewood that 2 ruffed grouse flew up in front of me and, forgetting all about the fire, I got my gun and started in the direction the birds had taken. I had gone but a little way when one flushed on my right and disappeared into one of the pockets of my shooting coat. That shot brought the doctor on shore and then the fun began. Everything was forgotten except the birds and in 2 hours we had enough of them. While going through an old wood road toward the boat I snapped the doctor, and on my return found I had a "winner," as it proved to be one of the best of the 36 negatives I got on that trip.

On our arrival at camp, Welch island, the rest of our party were more than surprised at the result of our day's work—7 large, plump grouse, 6 pickerel, the largest weighing $3\frac{1}{2}$ pounds, and 2 black bass.

I have enlarged the photo to 20x24 inches, and colored it. As it now hangs in Doctor Blake's office it makes a fine picture and is admired by all who see it; while to the doctor it is a constant reminder of a most enjoyable trip.

AN ANGLING EXPERIENCE.

H. F. HERSHEY.

One morning in August I started for a day's fishing in the dump, a body of water about 4 miles from my home. My companions were "Dad" and Milt.

A pleasant walk took us to the water. As a party of illegal fishermen had previously made several visits to the pond with nets, we found it useless to attempt to catch any bass, and had to content ourselves angling for the large sunfish that abounded in the water. We used small hooks and baited with worms—the ideal bait of the negro. Being compelled to fish from the shore we caught but few fish and during 2 hours of patient angling we were rewarded with only an occasional strike. Finally Milt disappeared through the rushes which bordered the path along the water's edge. Soon we heard a triumphant shout and in a few moments he appeared, seated in a skiff which he had found on the bank, and making good headway toward our stand with a board which filled the place of a paddle. Dad declined to join him in the boat, saying, "Guess things will liven up a bit along here purty soon."

I gladly consented, however, to accompany Milt on a prospecting voyage. Our craft was a round bottomed concern, which rocked violently at each movement of the occupants and leaked badly. This we were forced to counteract by frequent baling. The pond was almost covered with moss, but we found one spot where a clear, circular pool, about 10 feet across, looked inviting, and there we threw our lines. Our bait was struck instantly and the race was on. We substituted flies for our bait hooks and they seemed even

more enticing to the fish. In a short time we had 25 large sunfish flopping in the bottom of the boat, where 2 inches of water had been allowed to remain.

It would have been well for us had we then been satisfied and returned to the shore with our spoils; but we were wrought up by success and greed overcame prudence. We prepared to hoist anchor and move a short distance. I laid my rod in the bottom of the boat and was moving toward my seat when my feet slipped and I collided with Milt.

The boat lurched and took in water over the gunwale. Before a lightning calculator could count 10 we were both in the water and the boat was floating bottom up.

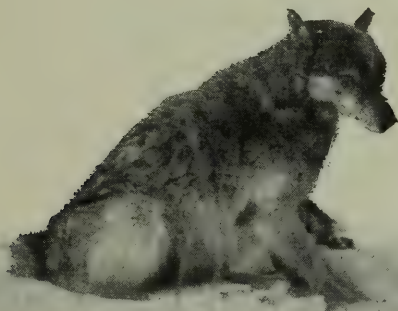
I struck out for the shore, and on reaching it looked back, to see what had become of Milt. He was perched on the inverted boat, with dismay pictured on his countenance.

"Why don't you come in out of the wet?"

"Can't swim a stroke with all these clothes on."

Here was a predicament, indeed! I converted myself into a life-saving crew, and, after several vain attempts, succeeded in towing the entire wreck, including the crew, into port.

Our ardor quenched and our clothes drenched, we found that Dad had deserted in order to reach home and tell our friends before we should arrive. They have made it pleasant for us, on occasions, ever since.



AMATEUR PHOTO BY MRS. L. R. VAN HOUTEN.

DISCOURAGED.



AMATEUR PHOTO BY ERNEST STURT AND FRANK KEELER.

AN ACCIDENTAL PORTRAIT. CAN YOU FIND IT?

THE STREAM OF DREAMS.

F. S. DICKSON.

I stand on the bank
Of the stream of dreams,
By a dreamland fishing pool,
With its o'er hanging tree;
And blithe chickadee,
And the rippling water cool.

I cast my fly
Near the old pine log,
Where the swirling waters curl.
I cast with skill,
And a right good will,
And then comes the longed-for swirl.

The stream flows on,
Though the seasons change,
And the blossoms fade and die,
And I go at will
To that mountain rill,
Till my journey's end is nigh.

PLAYING A PRIZE.

T. F. H.

Brother Gill and I have been inseparable anglers for years. Should you run across Gill fishing a stream I can be found not far away. There is and has been a constant rivalry between us as to who shall catch the largest trout. Numbers do not count with us. It is the sport of being afield or in the forest that lures us to the brooks. Furthermore, only large fish go to our baskets.

On a certain day last season the race between us had been unusually close. At 4 in the afternoon I had 12 good sized trout and Gill had 10. I felt I was far enough in the lead, and loafed along near by while he industriously fished every pool. I urged him again and again to pack up and start for home, but he wouldn't listen to it, and declared he would catch a trout that would swallow my entire catch with ease. That, I told him, would have to be a sturgeon.

Gill is great on playing a fish. I am, too; but since that day he is greater than I. On that occasion I wandered along and noticed that Gill stayed long by a wide and shallow pool. Holding his hand up in warning he commanded me to keep away. I obeyed, yet felt fearful that after all he would beat my record that day. Should I hurl a stone into that pool? Perish the thought! Not for a trout made of gold.

Suddenly a wild yell startled me! I rushed to Gill's side and found him playing a huge fish which he had successfully hooked. His rod was bent almost double, and he worked back and forth skillfully. How that fish did fight! Across the pool, back again, down stream, sulking under a rock, never yielding an inch without a desperate struggle. We could see his golden brown back when he came to the top of the water, and he looked every inch a 3-pounder!

"He will weigh over 3 pounds," Gill yelled. The look of worry came over his face.

"I fear I shall lose him," he yelled again.

A generous impulse sprang into my heart. I would help him land that fish though it smashed my record into bits. I rushed into the water and grasped the line. One final pull, and the fish was flung through the air, landing on the top of the bank. We looked at each other, Gill's face expressing unutterable thanks. Then we look toward the prize and at that moment he flopped over on his back. We exchanged glances again. A grin on my part at first, a roar of convulsive laughter, and then the boy was executing a war dance on his fish, filling him with lead from his 6-shooter between jumps. Gill had caught a sucker!

WORD SAVING POEM.

Some cooks bake with cottolene,
" " " " lard,
" " use no grease at all,
But their pie crust's mighty hard.
Some men chew their plug tobacco,
" " " the tag,
" " never work their jaw
Except to chew the rag.
Some men put their ads. in papers,
" " " them on the fence,
" " never advertise,
Who ought to have more sense.

—Tit-Bits.

FROM THE GAME FIELDS.

A GAME HOG WHO RUNS BY STEAM.

This letter is printed verbatim et literatim just to show how low and how vulgar a man can be who devotes his life to the destruction of game:

South Bend, Ind., Nov. 6, 99.

Mr. G. O. Shields,

N Yark

Dear Si in reply to yours of the 3 inst will say My son Leo and the writer Did Kill 100 mud hens and 88 good Duck one Weak ago yesterday on hudson Leak and as you wish to know the Particulars will given A true act of How it was done. in the first place I am well fixt for the Business and have killed more duck and spent mor money and given the mater mor thought than any man of my age being a practal genious and inventer I have devized many means of geting at the ever watchfull Ducks, and as I am growing old in the Busness and canot Stand the Exposure Hardships I use to I considered a come out the Idee of Killing Ducks from a Steam yacht.

I Built me a Steam yacht 35 long 8 fet Beam, and as I could not find on the market an Engine to my notion I Desided to make my own and after building Seven Diferent Kinds succeeded in geting what I was after a Boat that I can run ordinary 8 to 10 miles per hour and reserved power suficient to drive the yacht at the rate of 20 to 22 mile per hour for a half mile or so the above is all my own invention Built under my supervisian in our Plow Shop on the morning refered to we got up three oclock and had steam up and at the first rais of light in the East we started up on the north side of the lake and run clear up to the head befor we saw a sign of a mud hen or a Duck as we turned to com back we was both feeling blue as we had expected to Catch sight of them in the first haff mile as the Boat swang around towar the East we could see a Black spot way out in the midle of the lak and we head for it and on coming near we could see that they was mud hens the game we was after a small flock of some 20 25 and when we was within 150 yard of them I open up the throttle valve & we went into them my son shot both Barrels and I don like wise and we lower the small Boat and picked up 8 Dead ones and on looking further Down the lake near our Cotage we saw a very large flock so away we steamed after them. I cut the speed out and when within abt 200 yard of them instid of going

straigh after them (we alway get above & come down with the wind as the Ducks cant rais unles they turn and fly) up against the wind I turn to the left and they turned to the right and bunched up & Leo he open up the throttle and the yacht seamed to fairly fly through the water and I turn the yacht Direct toward them and as we neared them they seamed to be Demoralized as they hudled so close together that they covered every inch of the water and as we was upon them befor they evan started to fly my Boy let go one Barrel on the water and as they rose I let go my little gun 12 bore Both Barrels and Dropped it, and picked up my son Oliver's gun a remington Pump 6 shot and pumped it dry at them Leo got 3 shot with the Big No 10 gun & I shot 8 shot with No 12 shells comin black Powder No 7 shot by this time we was out of reach and reversed the Engine & back up and lowered the small Boat and Leo Picked them up and after he had them picked up & counted we foun we had Killed 52 Bird Dead with our 11 shots in abt as many seconds this with our 8 made 60 Bird killed Dead within ten minutes While we was admiring the shots Leo say Father what is them on looking in the Direction indicated I saw the largest flock of what is known in the country as Dubby Ducks

I says to Leo if thos stop in the lake we will have the Fun of Life we watch them Fly around the Leak three times and as they had looked the ground over for hunters & seen none they conclude to light which they Did in abt a half mile of us I shoveled the Fire Box full of coal & see that water was all right put on the Blower and in no time scarcely the steam was blowing off at 130 lbs to the square inch it seamed as though Iron & Steel enjoyed the sport as well as ourselves We held a short consultation of war and De-sided as folows as I am well posted as to the Habit of all Water fowl and Knew about what they would do as I have wiped out many a flock befor Leo was to shoot Both Barrels as quick as posable and then shut off and revers the Engine and stay by it for further orders but to Have plenty of Shells in reach and shoot as often as Possible all being ready we took a large circle around to get above them so as to come down with wind which had increast to a good stiff Breeze Just what we needed we let the yacht run probly 4 or 5 miles per hour speed untill they had noticed us and commenced swimming down with the wind and as befor I turned the Boat so

as the smoke from the Boat at a tryangle from the line of our coarse this brought the Ducks in the tryangle and they began to get frightened and first look at the Boat and then at the smok and by this time we had put on all speed and the Engine was exaustin like a pasenger Engine pulling a Train at the rat of a mile a minute and we had them so Badly frightened that they Began to Dive & by this time we was upon them & Leo let go the Big No 10 gun & I kept it up with my two guns the Engine was reversed & the Boat stoped in little over its length so we brough to a standstill in reach of those that Dove and they seamed to come up just as fast as we could load and shoot We dont Know or have any idee How many time we shot but kep up the Canade as long as there was any in reach and when we had them picking up & counted ther was (48) forty eight to our credit this Broke up the flock in to smoll flocks and as ther was so many with wings broke and cripled that they become easy victims as they preferred to Dive rather than take the chances flying which was good judgment in them we folowed them up untill we run out of amunition and run in to Breakfast & and on counting up found we had killed & got 87 mud hens and 64 Ducks got in at Half Past 7 oclock and Leos wife had Breakfast redy which we eat in a hurry & returned to finish the Spaniard as I remarked as we returned with amunition suficient to kill two Hundred more by this time the local Hunters near the lake had begun to put out in small boats shooting our cripples we killed and got 24 more Duck and mud hens enough to make an even Hundred could have Killed more mud hens but Desided not to do so I am 56 years old & this is the finest Days sport I Ever Had and I have Hunted since I was 12 years oald and use to Hunt Duck an the Kankee River and marshes when I Had to mak my living by selling the game I killed

I am going to build me a Faster yacht this winter

& if I live you may Hear from me again
W L Casaday

P. S. I Have a Photo of Part of the game as we caried it from the yacht to the Cotage Can send one if you wish What is your rates for advertising

ANSWER.

No, I don't care for the photo. I would advise you to send that to the Police Gazette. My readers all know what you look like, from your own description of yourself. One thing certain, there can be no doubt as to the length of your bristles.

As for the ad. I would not print it if you should bury it in gold a foot deep.—
EDITOR.

GRIZZLY PETE AND M. P. DUNHAM.

Jackson, Wyo.

Editor RECREATION:

I knew a man living at Henry's lake, in 1884, who was always throwing stones, but lived in a glass house. Old Grizzly Pete has written his word down, through a Lucerne widow stenographer, that he is trying to reform, and if no one throws up his past short comings, he is likely to survive these new fangled progressive ideas:

I ain't going to kill any more elk than I want to eat, and won't kill every blamed varmint I see just 'cause I want to shoot off the old .45-70 and see 'em drop.

In '84 there used to be some great guns up at Henry's lake—I guess there are yet. I don't see how they can make them any better, nowadays. I was just talking to my old woman last night, aid I asked her if she remembered those foxes old M. P. Dunham used to shoot at from the upper end of Henry's lake. The foxes used to be running around on the ice 4 miles away, and how he used to see his 50-120 Sharpe's bullets knock up the snow around them.

She said, "Yes, he used to tell about knocking the bark off that old pine tree way t'other end of the lake, 4 miles or more. And," says she, "he must have been telling the truth cause he could prove all these things by High Livermore, and old High wouldn't lie. The tree died afterwards."

I says to the old woman: "I don't believe he done it, 'cause that same winter, I knowed of a bunch of 17 elk calves, which come down on the east side of the lake, and Dunham and Deney McDonald went after them, each taking 50 rounds of ammunition. They wasn't very good shots them days, 'cause they had to come back to the house after more cartridges to kill the cripples, but they did manage to exterminate the whole bunch.

"Course I don't know how to compare them old guns with these new fangled ideas. I don't see how Dunham is such a crack shot, and how he knows a good gun from a bad one. If he tells the story himself, whv then of course he can make a good record, but when he shoots 150 shots into a bunch of poor, weak calf elks 'fore he gets them all killed, then I advertises the fact that he ain't a very good judge."

Grizzly Pete knows Dunham is a pretty good fisherman: I knows when he use to catch 400 to 500 big trout with hook and line out of Henry's lake every day, and some days when the market at Butte, Bozeman and Helena was good, then he would take the seine and get from 1,000 to 2,000 trout at a haul. The old woman says: "Yes, and there ain't many fish left in Henry's lake, I tell you. Dunham was a good fisherman, but he wasn't much of

a hunter. Why, I heard him tell old man Pierce he could guarantee to show him 20 mountain lions a week, and when they got to where the lions ought to have been he couldn't find one. All they killed was a cotton tail rabbit, 'cept the cook killed a black-tail deer."

And I says to the old woman, and old Dunham, says I, "Grizzly Pete are a game hog." and says I to myself, "I'm reforming, and the same ain't no lie."

Mr. Roaster Man, what do you think of Dunham?

Grizzly Pete.

HE DECLINES TO ANSWER.

A hunting party composed of E. S. Babcock, Henry Seybold, George and Fred Garretson, Nate Nichols and Dr. Barnes passed through Otay en route to the Otay dam. The sport began at 6 a. m. the next morning when the hunters entered boats on the reservoir and pulled from one end of the lake to the other. On the first trip over the water they brought down 700 birds, the trip occupying one hour and a quarter. Each man had 2 repeating shot guns, and was thus able to shoot 12 shots without reloading. Two more trips over the lake were made, and the total was brought up to 1,500 birds.

—*El Cajon (Cal.) Valley News.*

Here is another explanation of the rapid disappearance of game birds throughout the country. It will be remembered that a year ago Mr. Babcock wrote me, confessing to having been one of a party which slaughtered several hundred ducks, in the same way, at the same place as described above. I hoped the caution given him and his friends at that time would deter them from engaging in such slaughter again, but it seems they are hardened brutes, utterly shameless; that they care nothing for the rights of others so long as they can satisfy their own taste for butchery. It is strange that the California legislature does not pass a law prohibiting such work.

I wrote Mr. Babcock, asking him if the report was true and he replied as follows:

Your postal card received, in which you say you have been advised that I and some friends recently killed 700 ducks. You have been advised wrongly, nor do I intend to be caught by giving you any further information in regard to it and then have you twist whatever I say to suit your own ideas. We have phenomenal duck shooting here, and while we may not know what true sport is, our consciences are not troubling us any.

E. S. Babcock, Coronado, Cal.

ANSWER.

There is no question as to your knowing what true sport is. You have doubtless lived long enough and have mingled sufficiently with true sportsmen to know one when you meet and talk with him, and it is unfortunate you should not have absorbed some of the good qualities of these men from your association with

them. On the other hand, it is gratifying to know I am not alone in branding you and your kind as game hogs. I note that the press of your State has taken up the matter, and the fact that 50 to 100 clippings of each of these articles condemning you are sent me by people in your State, with the request that I give you another dose, is proof of the fact that decent men everywhere approve my course.

Here is a sample of the way the local press is treating these butchers:

Coronado, Oct. 24, '99.—Another murderous raid on the ducks at Otay Dam was made last Saturday. The party left San Diego Friday evening, and spent the night at E. S. Babcock's residence, at Otay. A start was made at 6 o'clock Saturday morning, and at 8 o'clock 500 dead ducks were counted as the result for 2 hours of shooting. A few more rounds over the reservoir followed, and at 1 o'clock there were 1,835 ducks ready for the return trip to town.

During the second round E. A. Hornbeck providentially received a full charge of shot intended for the ducks, that peppered his face and neck pretty thoroughly. Last Saturday's hunters included A. Reynolds, president of the Cuyamaca club, E. A. Hornbeck, N. Nichols, F. C. Ecker, J. E. O'Brien, C. W. Morgan, Mr. Noyes, C. B. Daggett, Henry Seyboldt and E. S. Babcock. The club's weekly slaughter is set to take place next Saturday.—*Los Angeles (Cal.) Times.*

I wish every one of these men might have gotten a charge of shot in the neck, even as Hornbeck did.—EDITOR.

FOR WINTER MEAT.

In the middle of October, 1893, I was in Jackson's Hole, hunting my winter supply of meat. Starting out early one morning from Dead Man's gulch, 10 miles from the foot of Jackson's lake, I crossed the prairie, intending to round the lake into the timber of the Southwest. This was a good place for game.

I saw a number of antelope as I crossed the valley, and killed one large buck, dressed it and packed it to a tree, where I hung it up to await my return. In the timber I saw abundant signs of elk, and soon I heard a bull-whistle. Dismounting, I started out to find him, and while advancing toward the spot whence the whistle had come, I heard a noise behind me. Turning, I found about 25 elk coming right to me, as if to run me down. I drew trigger on the leader, a large cow, which "tumbled to my racket." Another shot laid her calf by her side. The rest of the band ran back into the timber. I fired twice as they ran, but missed.

Presently I saw the band again, 75 yards away, standing still, watching me. With them were 2 large bulls, one in the lead, the other behind. I aimed at the leader's neck, and he dropped out of sight. Reloading, I fired at the bull in the rear, which also dropped. The others ran away.

I could have killed more, but having all I wanted I stopped. When I reached my first bull he lay dead enough, and I walked by, within 10 feet, intending

to find the second. In a moment, hearing hoofs tattooing, I looked around and found No. 1 running off as if untouched. Two shots carried my remonstrances after him, but he went on, and I started again for No. 2. He was gone, so I must have creased them both.

I dressed the cow and the calf and started for camp, intending to stir up the antelope on the way. I soon found a bunch, and started to crawl up on them, when they took alarm and ran right past, stopping 50 yards away to look. I bored one through the shoulders, but she ran 300 yards before she fell. They die hard.

The next day I went out and got the elk I had killed, and the second day took another hunt. Unsuccessful. Third day, unsuccessful, till nearly home, when I ran upon 75 of the elk. I was riding a good horse and resolved to run for it; headed off half of them, dismounted, broke a 2-year-old bull's hind leg and got him. I could see 200 elk from there go down to their winter range.

W. L. Winegar, Egin, Idaho.

AN AMERICAN IN KOREA.

Woodbridge O. Johnson, of Easton, Pa., is one of few Americans who have had the privilege of hunting in the interior of Korea. In that strange country Koreans, excepting the king's soldiers, are not allowed to possess firearms.

Mr. Johnson is a medical missionary, and represents the Presbyterian board of foreign missions. He is accompanied by his wife, who was Miss Edith Parker, a graduate of Vassar, and a native of Indiana.

Mr. Johnson graduated from Lafayette college in 1892. He subsequently entered the medical department of the University of Pennsylvania and received his diploma in 1895. He served 2 years in the Kings county hospital, Brooklyn, N. Y.

It was in the Maine woods that Mr. Johnson learned to shoot. Many vacations has he spent in that wonderland with his cousin, Olcott Payne, of New York City. Mr. Payne is now in Seattle preparing for a trip to the Orient. He recently received the following letter from Mr. Johnson:

"I have not had time to do much shooting. I have killed a good many Asiatic pheasants—larger and sweeter than our ruffed grouse—also ducks, which, with geese, are here in multitudes all winter. Deer are very scarce. At a monastery where I was studying with my teacher last spring there were several tigers and leopards about. I saw and got within 40 feet of a large leopard, but had no gun. At another place I saw from my window a large wildcat.

"I expect to visit and study at the same place this spring, and should like to try for a tiger. A bird I have seen, but not yet hunted, is the bustard, a big bird like a wild turkey in some respects, except that it flies high.

"The Koreans shoot very little, guns being prohibited to any but the king's soldiers, and the few sporting guns they have are flintlocks with full stocks. These shoot from the hip. My shooting on the wing amazes them. When not busy I hope to have more time for shooting.

"We are situated in a broad valley with mountains on each side, about 100 miles inland from Fusan, the Southeastern port opposite Japan. The greater part of the country is sparsely wooded, only in the North having much timber. Korea is as large as Minnesota, with a population estimated at 12,000,000. The people are of 2 classes, the laborers and the 'yangbans' or nobles. It is mountainous, except in the North, some peaks always covered with snow; deep, narrow valleys and a few broad plains."

OUR COON HUNT.

E. B. L.

Having heard from Farmer Wilson that the coons were making havoc in his cornfield, Jim and I, accompanied by his little water spaniel, set out one still, crisp, frosty evening with the determination of capturing the whole coon family. We had to travel about a mile and a half across lots, and help each other through innumerable barbed wire fences before we came within sight of the field of action. Our little dog, Trip, ran before us into every hole and corner, while we were busy laying our plans to drive the coons out of the cornfield, and as fast as Trip should tree them to take turns shooting them out. We even went so far as to draw cuts with sticks to decide which of us should shoot the first coon. The lot fell to Jim, and if he should miss the first shot I was to shoot him.

Just then we heard the dog barking away down across a field to the left, where a ditch ran across the meadow. We followed the sound and came to a small bridge which crossed the ditch. There we found the dog had treed something under the bridge. Panting and out of breath we waited a few moments, feeling sure of our game. The dog kept up a loud barking, but was afraid to go under the bridge and bring out the animal.

"I know he is a monster, or that dog of mine would bring him out," said Jim. "Or perhaps it is a wild cat."

We yelled, "Sick 'em," to the dog, but not an inch would he go under the bridge. Finally we lifted up a plank,

thinking we might see the animal's eyes shine and thus get a shot at him. Jim was to have the first chance. Getting down on my hands and knees I peered cautiously into the darkness, when suddenly something dashed into my face and eyes and a horrible smell filled the air. My eyes felt as if they were coming out by the roots. I doubt if any North American Indian ever performed such a war dance as I did the next 20 minutes. Jim laughed and yelled and kicked about like an old fool. His miserable little cur started for home with his tail between his legs, and that was the last we saw of him.

On our way home I promised Jim 10 loads of shot and an old Fenian dirk knife if he would not tell, but the next morning I could see a fly on a church steeple 4 miles away.

JUSTICE IS BLIND IN MAINE.

You wished to know the sequence of Game Warden French's seizure, on a wharf at Eastport, of the carcasses of 17 deer consigned to Boston parties. The deer were brought to the wharf in barrels by one Byron Lurchin, who runs a lighter between Pembroke and Eastport. French obtained 2 indictments against Lurchin, and brought the case before the Spring term of the S. J. Court in this city. One indictment was thrown out because of an error in the writ. On the other the jury refused to convict on the ground that Lurchin, being a common carrier, presumably did not know what the barrels contained. The fizzle in this case and in one or 2 others brought by Mr. French was duplicated in every criminal case which came before the last session of the S. J. Court. The prosecuting attorney failed to obtain a single verdict and became an object of ridicule among his brother attorneys.

Other cases in the Western part of the county also failed of their purpose, or were so modified that the punishment was practically nothing. Some of these parties were old offenders. When they were finally caught it was found they had a strong "political pull;" hence the failure to convict. French is an alert warden and applies the law without fear or favor.

The fish and game law department of our State has passed into the hands of the political machine, and is being used to protect politicians rather than game and fish. Only the vast extent of Maine's woods and waters saves her game from present extermination. Only a few weeks ago a head warden was appointed for this county (Washington) who is to have control over the county wardens. He knows

politics and nothing else, and it is said he was appointed on the understanding that French was to be retired. The friends of protection are losing heart, for French's retirement means a great blow to the game and fish interests. For the last 10 years deer have steadily increased in this county. French is so thoroughly feared that deer have a better chance here than in other parts of the State.

A. T. S., Calais, Me.

HOUNDING DEER AT TUPPER LAKE.

It has been my pleasure during the past year to read *RECREATION*, and I am in sympathy with you in your good work against those who abuse the privileges accorded them by our game laws and who would, if permitted, exterminate our game. Through ill health I have been obliged to live in the Adirondacks the past 10 years. Being fond of both hunting and fishing and having done much of both, I am in a position to draw comparisons relative to various changes in the game laws.

The Adirondack region certainly has its share of game hogs. I am acquainted with many sportsmen, and must admit that our guides are sometimes encouraged by them to break the law, particularly in deer hunting. The law forbidding hounding was the best thing done in years to protect our deer. This vicinity is already showing benefit derived from it. I wish it might be extended another 5 years when it expires in 1902.

The clandestine use of dogs ought to be stopped for hunting deer in the season when only still hunting is permitted. There are a few in our section who practice this low-bred business and actually in places where anyone of ordinary ability as a hunter can get a shot any day with little fatigue. I have been told on good authority that at and near Tupper lake hounding is openly indulged in, and has been for years past. I think the local game wardens are lax in their duties. This is in great measure due to the fact that they live in the territory over which they have jurisdiction. I say this by way of excuse, because we all know one is less apt to serve a warrant on a good neighbor or friend than on some one practically unknown. It seems to me to be wholly a success the warden should be a comparative stranger to those over whom he has control as a protector of game. Had hounding been continued much longer the Adirondack deer would soon have vanished. As it is there is no reason why the North Woods should not continue to offer as good sport as Maine or any other of our different hunting regions.

J. T. Gale, Bloomingdale, N. Y.

A LAWLESS GUN CLUB

We have a gun club here, and have many interesting shoots during the season. Last week we were out. During the shoot a flock of about 15 yellow-legged snipe came along, and several of the bystanders called to us to shoot at them. C. M. Delaware, Ben Shiro and another man whom I did not see fired. Two of the birds dropped. This was before the open season in this State, and, to cap all, these men thought they had done nothing to be ashamed of. Mr. Delaware said he ought to pay \$1 apiece for the birds, but the other men tried to make out that there was no close season on them and said they were plover.

A short time after this a small flock of little snipe about the size of sparrows came along, and a Mr. Loud, of Duluth, Minn., shot at them, killing 5. He did not even pick them up. If he did not want them what did he shoot them for? I roasted these men as well as I could at the time, but my arguments had no effect. The only other gun club member who said anything against such work was J. D. Finn, one of our best shots. He at present holds the "Head of the Lake" diamond medal. The most of the boys laughed at me when I roasted the others for shooting out of season. If prominent members of a gun club do not observe the game laws, and violate them openly and laugh about it, what hope is there for the laws?

Deer are slaughtered here all the year round. The game wardens who are appointed are not so good as wooden men, but the sportsmen can blame themselves for that, as they do not take enough interest to get good men appointed. The members of our club are just as bad as the others around here.

We have had a bad season for ruffed grouse this year, and I do not think there are many, as it has been too wet. Ducks are reported in fair numbers, but this is a poor place for them.

B. J. Shaver, West Superior, Wis.

I have taken up this matter with your State game warden and hope to have these law breakers punished.

EDITOR.

FIVE TURKEYS AT 2 SHOTS

I am an Indian and naturally enough I like RECREATION. I find lots in it to interest me. I will tell your readers the curious experience of a full blood Creek Indian while hunting deer and turkeys. This man went alone to a country about 8 miles from his home for a 2 days' hunt. He was armed with a .44 Winchester rifle. The Indians of the Creek nation are fine marksmen, and this one was a noted hunter. In the afternoon of the first day he

crossed a large brook. As he stepped from the water he saw a gobbler on a ridge ahead of him. He drew a bead on it and fired. There were no other birds in sight when he did so. When the smoke cleared away he saw the turkey he fired at flopping about on the ground, and another trotting off about 30 steps to the left. He fired at that one also and down it fell. The Indian went first to the turkey he shot last, picked it up, and then went to get the other. When he reached it, behold, there lay 4 large turkeys, some dead and others kicking their last kick! He had killed 5 turkeys in 2 shots! He says he will wear he saw but one bird at the first fire.

The next morning a mile from camp he struck a trail. Following it about $\frac{1}{2}$ mile, he found a large buck, and of course fired at him. The deer jumped up as if he had not been touched, but the Indian followed on, firing at every opportunity. He put 7 balls in the animal, every one in a vital spot, before the old buck would give up. While dressing the game the Indian found a lump of hard, rough substance resembling stone. It was in the deer's head and looked like a rock about $1\frac{1}{2}$ inches long and one inch in diameter. Whether this was what is called a mad stone the Indian does not know, but says the buck was the toughest animal he ever tried to kill.

Chas. Gibson. Eufaula. I. T.

A FOOL FOX

My father, brother and I went up Coyote canyon, Ventura Co., Cal., clearing off a ranch, and camped in a tent. The foxes were numerous and got rather bold, carrying off everything eatable, and especially having a liking for pieces of bacon. We shot several in the evenings before we went to bed, but one old fellow preferred to wait until later before making his raid, and anything we had failed to put away would be missing in the morning. One day my father said, "I believe I have a scheme by which we can fix him." Our cooking range, which consisted of several rocks arranged in 2 rows, was in front of the tent, and beyond that was a stake driven in the ground loosely, to hang our frying pans on.

"Take a piece of bacon rind," said father, "and nail it to that stake about a foot from the ground. Hang the pans at the top so they will touch each other and leave the flap of the tent fastened back. In the night when you hear the frying pans jingle, rise and shoot at the place where you think he ought to be, and I think you will get him."

Sure enough, along in the night the bell tolled, my brother sat up and fired.

We went out with a lantern and the fox was dead, having, as you might say, rung his own death knell. The old saying, "As sly as a fox," does not seem to apply to this one.

Boyd Ross, Ventura, Calif.

GIVE US BACK THE BIRDS.

In the seventeenth century the waters of the Chesapeake, in autumn, were covered with a floating blanket of canvasback ducks, swans and wild geese in numbers beyond the most extravagant dreams of the most notorious pot hunters. The noise of wings when the birds rose from the water was like the rumbling of an earthquake or the rolling of thunder. In the eighteenth century these flocks were a source of surprise and awe to the stranger. In the nineteenth century and within the memory of middle-aged men of to-day there were still counted hundreds of water fowl which visited the Chesapeake, and incredible numbers of quails, doves, mocking birds and other song birds filled the adjacent fields, forest and farms. Now that country is silent save for the hum of destructive insects and the oaths of the exasperated planters. Yet there are, here and there, in copse and wood, stray song birds enough to act as seed for bounteous crops in the future, and enough wild fowl are still killed each year, by the members of clubs for the extermination of American animal life, to again stock the waters with countless millions if they could be protected in time.

Give us back the game, and let us again be awakened each morning by the uncontrollable flood of music from our native song birds.

Dan Beard, New York.

TWO KINDS OF CABLES.

I received the copies of RECREATION promptly; also several letters from my wife asking why she did not hear from me. She will understand when she finds I have resubscribed to RECREATION. It seems like living again to have something good to read. I have been trying to catch up with the times by reading up on the battles you have been enjoying with the bristled enemy and rejoicing in the hot shot you have been giving them. That man at Vancouver, B. C., especially, made me weary. I can hardly believe Uncle Sam really employs men of that stamp for the position of collector of customs. It must be he is just a clerk, or an office boy who has slipped into the office and is practicing on the typewriter and spoiling government letterheads. I was feeling like writing a letter of sympathy to G. F. Webber, of Detroit, Mich., who has an article in the

February number, for having to bear the same name that has such a stain cast upon it, when, lo! and behold! I ran across your roast on the man named Cable; so my pity for G. F. has mingled with compassion for myself. Please do not look with suspicion on G. F. Webber and me for bearing the names we do. We cannot help it, and we wish to assure you there is nothing in a name. The greatest liar I ever knew was named George Washington.

Geo. L. Cable, M. D., Matanzas, Cuba.

Sioux Falls, S. D., Aug. 15.—William Dean and Herman Schulke, residents of Hamlin county, have discovered to their sorrow that the new South Dakota game law, which is one of the most stringent in the United States, is not to be trifled with. They are the first in the State to suffer under the section of the law which provides that any one seen driving or walking in the country with a dog or gun in his possession during close season shall be presumed to have violated the law, and shall be punished by a fine and the confiscation of his weapons. Dean and Schulke were seen in the country with their dogs and guns, but had not, as far as could be ascertained, killed any prairie chickens. W. L. Johnson, game warden of Coddington county, made complaint against the men. They were arrested by Sheriff Keegan, of Hamlin county, and taken before Justice Boswell at Castlewood for trial. The justice fined them \$15 each and costs, amounting in the aggregate to \$25 each, which they had to pay. Their shotguns were declared forfeit to the State, and will be sold at public auction to the highest bidder.—Minneapolis Journal.

IDAHO NEEDS PROTECTION.

If there be any game wardens or deputy sheriffs in Idaho one should be posted at the deer licks on Sulphur creek near Bear valley. When B. A. Maxfield, of Three Rivers, Mich., and I reached there last August we found the hundreds of deer that were 'always there before had been killed or run out. Some low down game hogs had built a log smoke house and jerked venison for the market. Two large salting vats were beside the smoke house. Near by was a pile of carcasses with the hides on. These they had tried to burn. They had evidently saved the horns.

At various places in the surrounding woods and marshes we found half carcasses. The parties who did the killing, I believe, are known. The meat was openly sold in Boise, so I heard when there last September. Why try to prosecute for killing a few grouse or one deer out of

season when these vandals are allowed to slaughter deer by hundreds while the fawns are yet so young that they also will perish?

M. W. Miner, Banner, Idaho.

PASSENGER PIGEONS IN MANITOBA.

I heartily commend your crusade against game hogs and pot hunters. I much prefer good flight shooting to 10 or 15 yard pot shooting.

The wild pigeon is returning to Manitoba. It almost entirely disappeared some years ago, but this year when I was in Southern Manitoba during my vacation I saw a few. I shot an old female pigeon with one egg almost ready to be laid. In fact, the shell was quite hard, and I think the egg would have been laid in an hour, as it was almost protruding. On opening the bird I found another egg, about as big as a pea. Would those have been laid in Manitoba? I suppose the big one would, but as I shot the bird in the middle of August the eggs could not have hatched.

Philip C. Locke, St. John's College,
Winnipeg, Man.

You should not have killed that bird. No one should kill a passenger pigeon for the next 10 years. These few stragglers that are returning should be carefully and sacredly protected and given every opportunity to increase.—EDITOR.

GAME DECREASING.

Having a few idle days and wanting something to read I borrowed some copies of what is called one of the leading sportsmen's papers of the day. I found some good things in it, but the page after page of shameful boasts by men who should know better made me heartsick. These men are game hogs, taking their own words for it. It appears by this paper that the only game hogs are market hunters and poor people in regions where the game abounds. Such, however, is not the case; some of the worst hogs we have are men who have money to burn. I do not wonder game and fish are scarce in places where they once were plentiful. Will the time ever come when men will govern their swinish instincts? Brother sportsmen, I beg you to spare the game; be merciful, stop when you have enough for your own use. If you do not there soon will be neither game to shoot nor fish to catch.

Ed. Blossom, Otsego, Mich.

WHO MAKES A DUCK CALL?

Where can I get a good duck call? Several years ago I managed to get a good one, but after losing it failed to find an-

other that had the correct tone. The dealers generally send out anything that will make a noise, paying no attention to tone. I will be under many obligations if you will recommend some responsible house who will send me what I want.

You are O. K. in going for the hogs. Have a few here. One or 2 of our wealthiest citizens hunt turkeys out of season. Wish we could get up a branch of the L. A. S. here. I have done all I could to interest our local sports in your work, yet only a few of them take any interest in game protection.

H. E. Scott, Columbia, S. C.

ANSWER.

I do not know who makes duck calls. Some years ago, a man somewhere in Illinois made and advertised them, but I have forgotten his name and address, and as I do not see his ad. nowadays, I assume he has gone out of business. If he were still making duck calls, he would certainly advertise them in RECREATION.—EDITOR.

GAME NOTES.

L. A. Stafford, secretary of the Rapides Fair and Racing Association, of Rapides, La., sends out a circular announcing a shooting tournament, in which he says:

"The Association desires this shoot to be one that will be long remembered in sporting circles, and will endeavor to furnish quail for the live bird events and hope to secure a sufficient number of quail for a very large crowd; in case of failure to get sufficient quail will use live pigeons."

Here is another case of cruel and inhuman slaughter that the humane societies should prohibit. It is a great pity that men can still be found who would plan such fiendish work as this, but since they do exist, the local authorities should look after them. I trust a law may be found on the statute books of Louisiana that will enable some good man to send these men to jail for 30 days each, if they attempt to carry out their dastardly plan.

Our quail hunting is decidedly different from the sport as practiced in the North. There the faithful dog plays the important role; here we have called upon the horse to help us out. That is, our shooting is done from horseback. The varieties of quail belonging here can seldom be induced to flush, but how they can run!

It takes a lively sprinter to overtake them if once they have the start of you, so we gallop after them on the horse and thus have some show to get a shot.

It is fine fun, if you and your horse are trained for this kind of action.

The only vegetation here consists of low bushes, mesquite, and torrella, and cacti of all kinds galore—everything well supplied with thorns. Deer are plentiful in the mountains in the immediate vicinity. There are no laws regarding the shooting of game in Mexico, at least, they are not enforced here.

E. Harms, Coquillas, Mexico.

In your issue of May, 1899, on page 357, is a picture and measurements of "A Exceptional Moose Head." I give you below the measurements of a moose shot by Stephen B. Decatur, of this town, he being a direct descendant of fighting Stephen Decatur, commodore in the navy.

The moose was shot on the head waters of the west branch of the Tobique river in New Brunswick, in the fall of '97.

Spread of antlers from tip to tip in a straight line, 66 inches; length of palm, not including points, 36 inches; width of palm, not including points, 14 inches; number of points, 28; length of head from front of ear to end of nose, 24 inches; circumference of snout, 26 inches. I think it the largest head I ever heard of. I heartily endorse your crusade against the "hogs" and believe you'll win.

H. F. Hunt, Portsmouth, N. H.

Shooting in this part of the country is not so good as it is in many parts of the middle West. Bob White quails are not native here but have been imported. They are protected until 1901 and are getting quite plentiful. Our game protective laws have been much improved lately and now the county commissioners have authority to appoint a warden in each county if petitioned by 100 voters. Mr. Flynn, warden for this county, is active and faithful and is doing good work.

About a year ago 4 of us went from here to Adams county, a distance of 75 miles, on a goose shooting trip. We shot in stubble fields, from pits, over decoys, and had fairly good sport. My shooting partner and I got 23 geese in 4 days. A few geese were brought home and make a fair showing in the picture taken after our return.

J. L. S., Walla Walla, Wash.

In company with my friend, J. P. Godin, I recently visited the surrounding bush of this place. To our surprise we discovered a wild pigeon on a stump. At sight of us the bird flew rapidly away. Mr. Godin, who is an old merchant and resident of this locality, assures me positively that wild pigeons have not been seen here for nearly 25 years. The one mentioned is the first

seen since that period. Would like to hear from other quarters of Canada respecting the wild pigeon.

Benjamin Sulte, F. R. S. C., Three Rivers, P. Q., Canada.

The Canadian government has recently issued, in pamphlet, "Notes on the Birds of King's County, Nova Scotia." This is an extract from the Ottawa Naturalist, and the material was furnished by Harold Tufts, of Wolfville, N. S., by commission from the government. Mr. Tufts is only about 18 years old, and the commission is, therefore, remarkable. It is a sufficient endorsement of the thoroughness and accuracy of his work and an honor of which he may well feel proud.

After a half-mile chase through the swamps surrounding Lake Calumet, Game Warden C. R. Ratto captured Charles Shranski, of Pullman, and arraigned him yesterday before Justice Quinn at Hyde Park on the charge of violating the State game laws by hunting between sunset and sunrise. Shranski pleaded ignorance of the law and was fined \$15.

Another levelheaded justice. It is gratifying to find an officer occasionally who is disposed to deal out coldblooded justice to violators of the game laws.—EDITOR.

Owing to some blunder of the legislature at Hartford, the bill we introduced in regard to rabbits failed to become a law. This is a great disappointment to me, and I can not exactly see how this blunder happened. Therefore that part of my letter to you, in which I spoke of the new law on rabbits, should be stricken out. Otherwise the law is as I stated.

F. P. Sherwood, Southport, Conn.

Can any of your readers explain the unprecedented flight of American crossbills occurring here last fall? It was unusual for the species to be seen here at all, but their loud chatter has been daily heard here the past 6 or 8 weeks. Either there has been a remarkable increase in the number of these birds, or they have changed the course of their Southward flight.

P. P. Beal, Lisbon Falls, Me.

RECREATION is great and is doing lots of good. It shames many a game hog into decency. Some of the older and more confirmed porkers are almost past praying for, but RECREATION will have its effect.

W. W. Potter, Buffalo, N. Y.

Captain William McMicken, of Olympia, Wash., died at his home in that city September 8th. He was an enthusiastic sportsman and was for many years president of the Olympia Rod and Gun Club.

FISH AND FISHING.

POISONOUS MUSSELS.

Some years ago, while encamped at the mouth of Rhodes creek, a tributary of Green river, Kentucky, I had my first and only experience with the mussel as a food. Time and again I had heard that this bivalve as found in the creeks and rivers of Kentucky and contiguous States was not fit for food, but I had never heard it was poisonous.

While running one of my trot lines I found several mussels hanging to the baited hooks, and resolved to try a mess of mussels "baked in the shell." I covered them with hot ashes and coals, and when they showed by their widely gaping valves that they were done to a turn, butter, salt and pepper were added to them, and I sat me down to feast. I managed to eat one, and, as matters turned out, it was fortunate for me that my palate rebelled as soon as it did.

The creature was decidedly tough, and tasted muddy and slimy. I imagined its flavor was like that of an old pair of boots that had rested on the bottom of the creek a year or so. I had never eaten any boots, but my imagination did not take that fact into consideration; it simply declared that a baked mussel, to the palate, was the same as a baked boot, old and water-logged!

About two hours after eating the mussel a pang shot through me. This pang was followed by other pangs until I writhed on the ground in agony. Finally, I began to vomit, and, so violent were my efforts, that the bottom of my stomach at times seemed to touch the back of my lips! Emesis was followed by a copious diarrhœa, which left me weak and tremulous for the balance of the day. I have never eaten another mussel!

THREE FORMS OF MUSSEL POISONING.

According to Professor Vaughan, of the University of Michigan, there are 3 forms of mussel poisoning. The first is known as *Mytilotoxismus gastricus*, in which the symptoms are like those of cholera morbus. This was the form in which I was attacked, as described above.

The second form is known as *Mytilotoxismus exanthematicus*, "on account of visible changes in the skin." The first symptom of this form of poisoning is a sensation of heat in the eyelids which spreads over the face and, finally, over the entire body. An eruption, which is accompanied by an almost insupportable itching, then makes its appearance. "In severe cases the breath-

ing becomes labored, the face grows livid, consciousness is lost, and death may result within 2 or 3 days."

Says Professor Vaughn in November Appleton's Popular Science Monthly: "The most frequently observed form of mussel poisoning is that designated as *Mytilotoxismus paralyticus*. As early as 1827 Combe reported his observations on 30 persons who had suffered from this kind of mussel poisoning. The first symptoms, as a rule, appeared within 2 hours after eating the poisonous food. Some suffered from nausea and vomiting, but these were not constant or lasting symptoms. All complained of a prickly feeling in the hands, heat and constriction in the throat, difficulty of swallowing and speaking, numbness about the mouth, gradually extending over the face to the arms, with great debility of the limbs. Most of the sufferers were unable to stand; the action of the heart was feeble, and the face grew pale and expressed much anxiety. Two of the 30 cases terminated fatally."

EDIBLE MUSSELS.

It was supposed at first—indeed, Virchow attempted to prove—that there was a distinct poisonous species of this shellfish. This, however, has been demonstrated to be a fallacy. All mussels are edible at certain times, presumably during the winter months. This, however, has not been demonstrated as a scientific fact, although the evidence is decidedly in its favor. It is said that this bivalve is doubly poisonous during oviposition, and this would account for my serious attack. The creatures were full of eggs at the time I made my experiment. On the whole, fishermen should shun the mussel. At best it is not at all palatable, and when it is poisonous it is very much so.

THE BOY AND THE BISHOP.

It happened at Bay View, which is one of the greatest Methodist summer resorts in the world. They make strenuous efforts there to teach the young idea how to shoot on all occasions, and to fish on week days only.

One beautiful Sunday, after church service, and Sunday school, and all the pious entertainments were over, some little cotton-mouth carried consternation into the camp of the sanctified by reporting that a crowd of boys were down under the dock fishing! A committee of clergymen, headed by an aged and prominent bishop,

was chosen to go down and labor with the little fellows. The bishop was selected to do the talking, which he did with such pathos and effect that the row of poor little trembling sinners clutched their rods and hung their heads for shame.

Suddenly a cork out on Michigan's blue waves bobbed ominously three lively jerks, then disappeared, the line drew taut, and the rod dipped. The unhappy little Sabbath breaker saw all this; but he stood in mortal awe of the good bishop, and land a fish in front of him, after that lecture, he dared not, if the fish pulled him off his feet. The bishop saw. His fluent discourse suddenly ceased and he watched that cork with breathless interest. As it sank out of sight he glanced at the cowering boy. Then the line began to cut pigeon wings through the shining water. The bishop took one step forward, with out-thrust arm, and shouted, "You got a bite! You got a bite! Jerk, boy! Jerk!"

G. S. P.

CANADA NOT UNDER DIFFERENT CONDITIONS.

I do not agree with a correspondent in RECREATION who says we are under different conditions from our friends to the South as regards fish and game protection. The only difference is that in the United States the remedy has come rather late, when forests and streams have been almost depleted, while in Canada we are awakening to the importance of applying a remedy before the game hogs and pot hunters have polluted our waters and forests to a far greater extent than saw-mills, tanneries, factories, etc., have done. The situation is bad enough with us, however. In the Rideau and Ottawa rivers, tained 15 or 20 years ago. Now it is did sport with gun and rod could be obtained 15 or 20 years ago. Now it is entirely different. Ten years ago in almost every trout lake within a circuit of 15 miles, excellent fishing was to be had; to-day, in many of these waters, enough could not be caught in a day to make a meal for 3 or 4 people. Why? Because enormous catches have been made, and shipped to the hotels and markets. These are plain facts and undeniable. I have always favored a law limiting the catch per day to each man, and I hope to see it enacted. The same as regards the quantity of game to be killed.

E. Edmond Lemieux, Ottawa, Can.

HOW TO STOCK WITH BLACK BASS.

Will you please tell me, through RECREATION, how to stock a lake with black bass?

H. L. Imus, Ann Arbor, Mich.

ANSWER.

Stocking a lake with bass is a simple matter if the lake is situated in a region where the bass is indigenous. The only thing necessary is to go to any stream or water in the neighborhood which contains bass, catch with a seine as many bass as may be desired, put them in a tub of water or other large vessel, take them to the lake and turn them loose in it. To keep them from jumping out of the tub cover it with an old gunny sack or something of the kind. Late in the fall is a good time to make the plant, as the fish are not so apt to die as in warm weather. The large-mouthed black bass is best for lakes, though in the cold lakes of Northern Indiana, Michigan, and Wisconsin, the small-mouthed black-bass does equally well. In Lake Maxinkuckie the small-mouthed seem even more abundant than the other species.

B. W. Evermann.

CAN PROVE HIS CATCH.

My old pard and I were camping out on one of the beautiful inland lakes in the Northeastern part of the State. We had fished faithfully all day, using all kinds of bait, both natural and artificial. We had worn the plating off from our spinners, dragging them around the lake, but had not landed one fish. It was getting dark, so we suspended hostilities, thinking perhaps the wind would change during the night and give us better luck the next day. When we arrived at the boat house we baited 5 of our hooks with angle worms and stuck the rods fast in the dock, with the hooks in the water, as we supposed. In the morning we went out to see what luck the night had brought us. Our hooks were at least 3 feet from the surface of the water, and each hook had a fat bull-head on it, hanging up there high and dry. We figured out that those fish had got up on the dock, climbed out on the poles and slid down the lines to get the bait. If anyone is skeptical or doubts this story I can show him the lake.

Frank Corlis, Dansville, N. Y.

NIBBLES.

The Rio Grande river, from its junction with Willow creek, has for the past year been filled with dead and dying trout, presumably killed by the poisonous water which comes from the concentrators at Creede. Last July, while camped just below Wagon Wheel Gap, our party found hundreds of trout floating down stream dead or dying. I understand there are no screens at the head of any of the irrigation ditches below Del Norte. When the ditches are closed millions of trout are left without water, and are, eventually, thrown

into wagons and hauled away for fertilizer. This condition of affairs is ruining one of the finest trout streams in Colorado, and there should be some way to stop it.

F. W. W., Kansas City, Mo.

Four fishmongers are in a serious difficulty with the State Fish Commission. Last Saturday Deputy C. A. Vogelsang visited the Union Fish Market and discovered a box of salmon in the possession of 2 fellows named Gusti and Sposito, in violation of the law which prohibits the taking or possessing of these fish until Saturday night next. Mr. Vogelsang seized the catch and was taking it away when he was set upon by the 2, aided by several of their fellow employees. He was no match for the half dozen brawny fishermen, who hurled him aside and carried off the box of fish. Yesterday the 6 were arrested on charges of having salmon in their possession during the closed season, and of assaulting and interfering with an officer in the discharge of his duty. Bail was fixed at \$200 in each case.—*San Francisco Call*.

And I trust the Dagos were fined at least \$100 each.—EDITOR.

A boy's fishing rod was fastened to the root of a tree on the river bank, and he was sitting in the sun playing with his dog, idling the time away. He had been fishing all day and had caught absolutely nothing.

"Fishing?" inquired the man passing.

"Yes," answered the boy.

"Nice dog you have there; what is his name?"

"Fish," replied the boy.

"Fish? That's a queer name for a dog. What do you call him that for?"

"'Cause he won't bite."

Then the man proceeded on his way.—*Cleveland Leader*.

A small mouth black bass, the largest ever caught in this vicinity of which there is a record, was recently taken in Carp lake near Southard's hotel, by R. M. Williamson, of Chicago, who a few weeks ago caught there a 7¼ lb. bass of the same variety. This latest catch weighed 7¾ lbs., measured 23½ inches in length and 20 inches around. Nearly 20 minutes were required to land it.—*Morning Record*, Traverse City, Mich.

Are you a fly fisherman? If so, why not send me 2 subscriptions to RECREATION and get a dozen high grade assorted trout flies, listed at \$1? Or 3 subscriptions and get a dozen high grade assorted bass flies, listed at \$2?

THE RUFFED GROUSE.

HERBERT BASHFORD.

A lover of dim ways in woodland shade ,
Is he whose martial music shakes the
still,
Cool air where lilies drowse and silver
rill
Alone draws light adown the gloomy
glade;
Where, deep within the hush, dank moss is
laid,
That Solitude may rove from hill to hill,
With soundless tread, and where no
bird's glad thrill
E'er breaks the iron silence God has made.
To haunt sequestered dells is his delight
Beneath low-drooping ferns that shadow
all
The dreamy pools; and when, care-
worn, we come
To where the wilderness makes of the
Night
A dusky slave forever held in thrall,
We hear the throbbing thunder of his
drum.

GUNS AND AMMUNITION.

LIKES THE MOGG SIGHT.

Mr. Wilson, of Syracuse, speaks of buying a telescope of L. N. Mogg, and says he is doing good work with it. I, too, have a Mogg, on a .30-30, and with this combination I can get more woodchucks than with anything I have ever seen. When Mr. Mogg put on the sight, he said the rifle was the best shooting .30-30 he had then tried. With it I have, and think I can again, put 10 shots on the size of a quarter of a dollar at 110 paces. The first time I ever used it I shot 12 shots at 11 woodchucks and a large hawk. The first was a miss, but the rest were all kills, 10 chucks and the hawk. I have used the Du Pont .30 calibre powder, and the Du Pont No. 1, with different loads, and with bullets from one to 10 to one to 20. I lubricate every bullet, and have never had any trouble with leading. In my opinion, if the users of the .30-30 would tell just what load they use when they are satisfied or otherwise, the conflicting reports we have would soon clear up. I know from actual trials that a bullet driven by black powder at, say, 1,300 feet a second, will not mushroom like the same bullet driven by the government smokeless with a velocity of 2,000 feet a second. I have wind gauge and Vernier screw mount on my mountings. The glass is 10 power, and will show a bullet hole in the white at 200 yards. I have open sights on mountings, and like them, too. I have shot many a chuck with a Remington Creedmoor .44-105-550, and with the full load it will tear a large hole in a woodchuck. I don't mean to convey the impression that a .30-30 will shoot as close as a .32-40, but let Mr. Mogg put on the glass and you will be well pleased with the work. I have a Baker Paragon shot gun, No. 360, and have yet to find the man who has one of this grade and is willing to give it up.

James H. Pixley, Schuyler Lake, N. Y.

SHOT GUN SMOKELESS.

I have always been interested in your Guns and Ammunition department, and have read with great pleasure the various contributions relative to tests with smokeless powder. Recently I have carried out some tests myself, and believe my experience will be of some interest to other sportsmen.

During the past 2 or 3 years I have tried the various nitro powders on the market, and have succeeded in getting fairly good results with all. In this in-

stance, however, I desired to make a practical test, and to that end took half a dozen of the best known nitros with me, on my vacation, from which I have just returned. I tested these powders in bird shooting as well as at targets, and kept tab on the various loads, as far as was possible in the field. My best results were obtained with shells loaded with Laflin & Rand shot gun smokeless. The charge I used was 42 grains, with 1¼ ounces of No. 7½ chilled shot. I found that with this load I could stop the birds at any reasonable distance. When I missed it was my fault, and not that of either the gun or the shells.

I was pleased with the trial I made at targets, the pattern and penetration both being wonderful. The absence of smoke, the slight recoil and the cleanliness of this powder were just what I had always wished for, but which I had despaired of finding. The Laflin & Rand shot gun smokeless is all right, and if I had 10 days more to spend with the birds my shells would be loaded with this powder alone. I am confident a trial will convince anyone of the merits of this powder, and that when he has once used it he will discontinue all further experiments with smokeless powder.

Robert Skinner, Lexington, Ky.

HAVE YOUR GUNS TREATED.

Can the Gun Bore Treatment Co., of New York, so treat a pair of gun barrels that they will not rust, lead or pit? Will some of the readers of RECREATION kindly tell their experience in the matter?

Also, will some one tell me which is the better gun cleaner, the Tomlinson or the Budd-Petmecky?

A. D. Hammond, M. D., Brockton, Mass.

ANSWER.

I know the Gun Bore Treatment people intimately, and they are thoroughly reliable in every way. I have had them treat several of my guns, one both inside and outside, and if I had 50 guns I should have every one of them treated.

I have been familiar with the process more than a year. I saw one gun that was treated in Los Angeles, Cal., by the inventor of the process, nearly 4 years ago. It has been used and abused thoroughly every shooting season since. It was used for duck shooting on the coast, and was frequently left out over night in fog, spray, rain, or whatever came. It has never been cleaned in these 4 years, ex-

cept to occasionally rub out the barrel, in order to show some interested party that it is still in good condition.

I am positive the treatment will not injure a gun in any way, and that, on the contrary, it may safely be applied to the finest gun ever made, with a certainty of protecting it thereafter against any kind of use or abuse.

I regard the Tomlinson cleaner as far superior to the other one you mention. Furthermore, the Tomlinson is advertised in *RECREATION*, and the other is not.

EDITOR.

SMALL BORE SUITS HIM.

I am a small-bore crank. I think the .32-20 Winchester the best rifle made, considering its size. I have hunted with all calibres, from a .32 to a .50 needle gun. For deer and smaller game up to 300 yards I would not lay down a .32-20 for them all. I have killed probably 300 deer and antelope in my time, so you can judge I have had some experience, though I am but 26 years old. I believe if a deer is shot in front of the diaphragm with a .32 it will not run so far as it will if shot with a .44 or .45. The .32 bleeds inside and stops the action of the heart quicker.

I have a Parker 12 gauge shot gun with fine Damascus barrels, and am perfectly satisfied with it. I use Lyman rear sight, and front of my own make. I reload all my own cartridges, using Ideal tools; but think the Peters cartridges the best factory ammunition made. However, I prefer my own make to them all.

.32-20 Crank, Drewsey, Ore.

Why did you kill so many deer? What did you do with them? You certainly do not wish to admit you are a market hunter and that you sold them? You certainly could not use them. From your own story I should judge you are one of the worst of all the butchers.

EDITOR.

HOW TO BLUE STEEL.

I had good luck on my hunting trip in Northern Maine. I killed instantly with my .30-30 carbine a 300-pound bear and a large 5-prong buck deer. The buck was facing me at 100 yards, and I hit him in a line with the brisket, right between the shoulders. The soft nose tore a hole that I could nearly put my fist in. The bear was hit back of the shoulder and I think the bullet went through her heart. It came out near the opposite hind leg. The .30-30 carbine is a powerful weapon, and I think it will throw a ball about a mile and a half.

M. C. Murphy asks how to blue parts of steel. It can be done as follows: 1st. Wipe the part to be blued perfectly clean so no

oil is on it. 2d. Polish it with fine emery dust and wipe it off again. 3d. Get a flat piece of iron about $\frac{1}{2}$ inch thick and heat it nearly red hot. Put the part to be blued on this iron and soon it will turn straw color. Then it will get darker until a beautiful dark blue shade will appear. After this put it aside to cool.

R. D. Benson, Jr., Philadelphia, Pa.

APPROVES THE REPEATING SHOT GUN.

Your persistent efforts to raise the standard of sportsmanship meet with hearty response from every true lover of the rod and gun. Any reader of *RECREATION* it has been my fortune to meet has had nothing but commendation for your policy.

"Old Shooter," in September number, seems to be looking for trouble, and doesn't know exactly where to find it, but lets fly on general principles. I shoot a repeating shot gun, and maintain it is just as much a gentleman's arm as any double gun ever made. The fact that a fool sometimes owns one is not the gun's fault any more than a double gun is to blame when a beast who carries one blots out a whole covey of birds at 30 or 35 yards. A double gun is a good gun if properly made and in good hands, while there has never been made the equal of the Winchester repeating shot gun for anywhere near the price. The fact that a shooter may use either style of weapon does not brand him a game hog, or a gentle sportsman, as the case may be. It all depends on how he uses his gun.

Dr. R. N. Sessions, Huntington, Ind.

THE .32-40 WINCHESTER.

Where can I get a Remington, a Berdan (Russian model), or a Martini Henry (Turkish model) rifle? I had a Martini Henry .45-85, 36-inch barrel, and lent it to a so-called friend, who skipped with it. Wherever he is I hope he will read this, because for range, penetration and accuracy the rifle was second to none. I have used a .30-40 Winchester smokeless, and for range and shocking power it is superb, but accuracy is lacking. If you would believe all that is said by small-bore cranks you would be deceived. Remarkable stories are told of hits made by .30-40's, but if the misses were all recorded *RECREATION* would have to get out a supplement.

.45-85-480, Hoboken, N. J.

ANSWER.

You can buy a Remington single-shot rifle, calibre .43, Spanish, for \$12, or a Peabody-Martini, Turkish model, .45 calibre rifle, for \$18, from Hartley & Graham, 315 Broadway, New York.

PREFERS A RIFLE.

I think the shot gun is one of the things the L. A. S. should condemn. It is too easy to get game with a shot gun, and so men kill more than they need. If they don't get 15 to 50 rabbits in a day here they think they are not doing well. Six or 8 men, 3 or 4 dogs, shot guns and a ferret or 2 make the combination. I had a rifle and was glad to get one or 2 squirrels in a day, but I once got the shot gun fever, though I did not get my share of game. I borrowed a shot gun and went out with 2 companions, a dog and a ferret. We got 6 rabbits. I came home disgusted and cured. Too much like butchery. The game had no chance for their lives.

We have some quails yet, but the winters are hard on them, and the shot guns are worse.

A. J. Knowles, Otsego, Mich.

ENDORSES THE REMINGTON.

I have a 12 gauge, 7½ Remington hammerless, grade A, with 30-inch barrels, and I don't think there is a better gun made. The balance is perfect, and the rib is straight and flat instead of being sagged in the middle like that of some guns I have seen of the same or even a higher price. I have never seen a gun, regardless of price, that shoots any better. I compared it with a gun of another well-known make, that is often praised in RECREATION, and the owner himself decided in favor of the Remington. I think a sportsman's outfit should consist first of all of RECREATION, then a Remington double barrel, a Winchester repeater, of calibre to suit the owner, a Stevens or Remington target rifle, and any powder or ammunition advertised in RECREATION.

D. C. Avery, Dunmore, Pa.

SMALL SHOT.

I have a .30-30 Winchester, 94 model, 26-inch barrel, half magazine. Is there any other gun better than that for big game hunting, excepting, of course, the 95 model Winchester? Is the Savage enough better to justify me in selling the .30-30 and buying one?

What would be the range and penetration of a .32 and .38 ball, fired from a revolver?

On the box of a revolver I have read, "do not use smokeless powder." Does that refer also to King's powder in Peters's cartridges?

Would a .32 revolver be big enough to carry on a cattle ranch? Or would a .38 be better?

J. D. N., New York City.

I notice "Subscriber's" contention in regard to the rule of falling bodies, as applied to a rifle bullet. If "Subscriber" will put on his thinking cap he will remember that the muzzle or initial velocity of the .30-30 bullet is so great as to almost entirely overcome the force of gravitation for the first 300 yards, and that, therefore, the bullet does not fall 4 feet in that range, nor anywhere near that. As an example of speed overcoming gravitation, I refer "Subscriber" to the old school-boy trick of gliding at a high rate of speed, on skates, over thin ice where the first slow step could not be taken without a dead certainty of getting wet.

J. H. M., Jersey City, N. J.

There is an error in my article in November RECREATION. The length of barrels of the 11-pound Parker, 10-gauge, is not 24 inches, but 40½ inches. The shells are 3¼ inches long, and the gun was given all the powder it would use.

I never knew what an immense advertising medium RECREATION is until that article appeared. I have received letters from everywhere, Canada to California, York State and Pennsylvania, and am daily expecting one from some game hog in h—I, wanting a gun to outshoot those of his unfortunate kind who are there with him.

J. A. Elliott, M. D., Northumberland, Pa.

Have just bought a .30-30 Winchester nickel steel barrel rifle and tested it.

I set up target at 20 rods and shot 5 shots at it with a heavy wind blowing across the line. For one shot I used the soft nose bullet. After the explosion I found 5 grains of powder in the barrel unburnt, and a depression of ⅛ of an inch in the shell. Can anyone account for this? I think RECREATION is a grand magazine for sportsmen, because it gives so much valuable information.

Will C. Root, Carthage, N. Y.

I have an innocent looking little shot gun that "kills 'em away 'round the corner." It is a single-barrel semi-hammerless Remington breech loader; weight, 6¼ pounds; 34-inch barrel, 16 gauge, and closely choked. While out hunting recently I killed 3 squirrels at a great distance and a rabbit sitting in the road was killed stone dead at a distance of 109 steps. The gun, of course, is only for long range shooting. It would be useless for brush or wing shooting.

D. P. Cramer, Springfield, Ill.

A few days ago I fired my .30-30 at a mark on a pine tree 14 inches in diameter. The bullet went through and made a hole where it came out no larger than where it went in. The next day I fired about 100 yards at a woodchuck. The ball went through him, struck the ground 10 feet beyond and dug a little furrow about a foot long. I found the bullet lying on the ground, as perfect as when it was put into the shell. Can anyone tell what stopped it?

H. N. Chase, Conway, N. H.

I agree with Charles Cristadore. A man who can not down his bird with one or 2 shots does not deserve the bird. A good dog and a good double barrel gun are all any good sportsman requires. If there were fewer pothunters there would be more ducks, quails, chickens, and other game birds and better shooting for us all.

F. J. Rauh, Bronx, N. Y.

Will some one who has used the Baker hammerless gun tell me if the firing pin safety device is as good as the manufacturers claim? If so, why don't other gun manufacturers catch on?

E. I. Oliver, Blanchester, O.

Mr. Carlos C. Clark, of this city, is an expert gunsmith, well known throughout this section. He is 89 years old, and still works at his bench when some fine work is needed. On October, 1895, he put 10

successive shots in a target about the size of a silver ½ dollar. He made this record with a 15-inch rifle at 50 yards.

Annie F. Blake, Manchester, N. H.

Is there a .48 calibre revolver or cartridge?

What calibre revolver does the Chicago police force use?

C. M., Hamilton, Mont.

ANSWER

I do not know of any .48 calibre revolver or cartridge in the market. Does any one else know of such?

The Chicago police force is armed with .38 calibre revolvers.

EDITOR.

I have just given the Laflin & Rand smokeless powder a trial on clay pigeons, with most satisfactory results. Although a novice at the traps I made a score of 17 out of 25. The powder is quick, smokeless and clean. The clay pigeons I hit were simply pulverized.

Louis Weinmann, San Francisco.

In reply to Garrett P. Serviss, Jr., I would say I own a Stevens rifle and consider it the most accurate rifle I have ever used.

P. W. Harlow, Farmington, Wash.

I don't see why a man using a repeater should be a game hog any more than one using a double barrel. I like the repeater on account of the single barrel and trigger.

H. C. Wahlgren, Jamestown, N. Y.

MY RIFLE.

W. H. NELSON.

Wrapped in its worn, old canvas case,
Upon my study wall,
As wild November's trumpets blare.
And autumn's glories fall,
My dear old rifle idly hangs,
While I, disabled, dream
Of bygone days in woodland haunts
Or by the mountain steam.

The antlered monarch of the waste
Glides silent down the dell,
His timid harem following
To drain the crystal well.
I mark their wide and watchful eyes,
Their nostrils' hint of fear,
And press the trigger as my bead
Glow on the leader near.

Close crouching on the pine's low bough
The puma's body lies,
Death gathered in her quiv'ring limbs
And blazing from her eyes.

My ready weapon instant speaks
And sharp its challenge calls;
See, shrieking, from her ambushade
The writhing demon falls.

And not alone in forest shades
My trophies I have won,
But at the target, too, I've proved
My matchless Remington;
For never was my trust misplaced
Nor ever stuck a shell—
The plain old weapon showed no frills,
But did its duty well.

Alas! its master haunts no more
The forest pathways dark,
Nor hearkens by the sylvan fount
The deer's soft tread to mark.
And so, disused, the rifle hangs
Against my study wall,
While wild November's trumpets blare
And autumn's glories fall.

NATURAL HISTORY.

A PLEA FOR THE INNOCENT.

In spite of all that has been said and written, not one sportsman in 10 will refrain from shooting any hawk or owl that comes within range of his gun. Something in the name "hawk" seems to suggest a robber, destroyer, or thief, to the average Nimrod, and he deals with the bird accordingly. On account of some few chickens lost, the farmer is even more eager to kill these persecuted birds than is the sportsman. Downright ignorance is the only explanation of this feeling. I am a great friend and admirer of the so-called birds of prey, or *raptores*, and I beg to urge a thorough study of their habits before one more innocent bird is slaughtered.

As a class, the *raptores* are far more beneficial than otherwise. Two species of hawks and one of owls are not worthy of protection, their good qualities not being sufficient to balance the bad ones. These are the Cooper and sharp-shinned hawks, *Accipiter cooperii*, and *Accipiter velox*, and the great horned owl, *Bubo virginianus*. To these 3 species all the blame that is inflicted on the whole race virtually belongs. To quote a well-known ornithologist: "The farmer sees a hawk sailing in wide circles above him, uttering its fierce, screaming cries. . . . While he is watching it a sly, low-flying *Accipiter* slips by him and makes a sudden dash into the poultry yard. The farmer does not discriminate. A hawk is a hawk; and shaking his fist at the bird in the air, he vows vengeance at the first opportunity." Such is the general feeling toward these birds, all because of ignorance in regard to their habits, and the belief that "a hawk is a hawk." There are, however, certain characteristics, whereby anyone can distinguish the noxious from the harmless species.

It seems wrong that all these species should suffer for the depredations of 2 or 3. Of the 3 *Accipiters* mentioned, the goshawk is so rare it can hardly be held for many of the crimes in this part of the country, leaving the burden on the other 2. The Cooper hawk, known also as the pigeon hawk, blue hawk, blue darter, and chicken hawk, is the greatest enemy of the poultry yard. The sharp shinned is too small to do much damage in that direction. It is, however, wantonly destructive of small song birds, and as its favorite morsel seems to be the quail, it is not by any means a desirable species.

The other species are among the best

friends man can have. They eat large numbers of meadow mice and red squirrels, the 2 most persistent grain and corn destroyers the farmer has to deal with, and the number of other small noxious rodents that constitute their bill of fare is surprising. Frogs, snakes, and various insects are also relished by these extremely useful birds. Occasionally, when food of this kind is scarce and they are hard pressed by hunger, they will, perhaps, take a chicken or 2, but such cases are rare. The farmer can well afford to reward them now and then for the vast amount of good they ordinarily do for him. It seems impossible, however, to convince him of this.

An examination of the stomachs of 2,690 hawks was made by the Division of Economic Ornithology of the Department of Agriculture, and the results proved the standing of these often misjudged birds. The specimens were taken in all parts of the United States, and at all seasons of the year, and only a small percentage contained either poultry or game birds. I cannot give the report in detail, but it was proved that, with the exception of the species above mentioned, the *raptores* are an extremely beneficial class, worthy of all protection the law can give them, instead of being outcasts, ranked with the English sparrow. There are still several towns in this country that are giving bounties on the heads of all hawks and owls, thinking they are doing the right thing, when, in reality, they cause the killing of thousands of birds that would protect their crops, and only once in a while get a real culprit. The birds that suffer under this law are for the most part useful. The Cooper and sharp shinned hawks, by reason of their secluded nesting habits and rapid flight, are seldom taken.

It is not difficult to distinguish the different species even at a distance. Each has certain unmistakable characteristics. The first 2 species in my classification have their descriptions in their names. The red tailed is the largest of the race and can be easily recognized by the rich rufus coloring of the tail. This and the red shouldered hawk are the large ones seen so often, high in the air, sailing at times almost out of sight, and are likely to be confused. If their notes can be heard identification is easy, as the former utters a long drawn out squeal, kee-e-e-e-e-u, while the latter's kee-you, kee-you, is entirely different. Then, too, the red tail is always in evidence on the former, while a rufus patch on the latter's shoulder, and

its smaller size, serve as additional marks.

I will not attempt to describe the fish hawk, as I think he is well enough known to all. He is not met far from water, and will not be confused with the others.

The goshawk is interesting, but his rarity makes a thorough study of his habits impossible in this section. His home is in the far North, and his visits in this climate are irregular and infrequent. He is the boldest and most destructive of the race, and it is a good thing he is not a constant resident with us. He is handsome, like many other villains, in his suit of steel blue and white. He does not hesitate to fly even into a farm house if a plump chicken he has set his eye on happens to take refuge there, and he seems utterly fearless of mankind.

The Cooper is the common chicken hawk. His disposition is like his first cousin's, the goshawk's, though perhaps a trifle less reckless. Being smaller he is not quite so destructive. Nine out of 10 chickens that mysteriously disappear may be counted against this species. A farmer told me last spring that a hawk took 12 of his broilers in one day and carried them off to the woods. A Cooper has nested there for several years and for the brood of 5 young hawklets 12 chicks would not be half enough. All the farmers in that vicinity were more or less troubled. I have often found the remains of quails in Cooper's nests, and their destruction of this noble game bird is, of itself, enough to condemn them; but until the hunter is familiar with this particular species, let him refrain from using the gun and not make the mistake of killing one of the harmless hawks. This brigand may be known by his movements, which are quick and somewhat snakelike. He winds his way through thick woods and underbrush with lightning speed, with apparent ease, and his erratic movements at once betray him. At a distance he can be identified by his long tail, which serves the purpose of a rudder in his eccentric flight.

Male hawks are always much smaller than their mates. For this reason identification by size alone is not possible in most cases. The male red tailed is but a trifle larger than the female red shouldered, and Cooper and the female sharp shinned are so similar in size, color and markings, that one can not always distinguish them with certainty. The tail is the only key. In the former it is square at the end and in the latter it is rounded. Well do the small birds know these 2 murderers. Their approach is heralded by a chorus of frightened cries from all the feathered tribe, and there is a great commotion and a general hurrying to some place of safety in a thick bush or hedge. The sight of any

other species does not alarm them at all, and this fact alone is enough to exonerate the others.

The marsh hawk is perhaps the most beneficial of the whole tribe, and certainly does the least harm. Mice, moles and frogs constitute by far the larger part of his diet. He is seldom seen far from the ground, and is the only hawk that nests on the ground. For this reason he is more easily and more often shot. Almost any open bog of any size is the home of a pair of these birds, cranberry bogs being given the preference. With slow, graceful flight he hunts over the fields and beats up and down the hedgerows and fences for his favorite meal of mice, seldom more than a few feet from the ground, a large white patch at the base of his tail serving as a sure mark for identification.

The broad winged hawk is not common, but at the same time can hardly be classed as rare. Last spring I was fortunate enough to find 3 pairs nesting. The species may be recognized by the short, stubby tail and rounded form, combined with its small size. The other species of this size are long winged and long tailed. He is a quiet and retiring bird and is not likely to be found unless persistently looked for.

The sparrow hawk is common in nearly all parts of the United States except New England. I know of but 2 pairs that breed here. Although small, they are the handsomest of the *raptores*, and are very interesting. I have a pair I raised from the nest and they are amusing pets. They are the only real falcons in this part of the country, and are closely allied to the famous falcons of the middle ages. Their food consists mainly of grasshoppers and the English sparrow, making them public benefactors. They are a trifle smaller than the sharp shinned hawk, and may be distinguished by their bright colors and constant cry, "killy, killy." Both of the nests I refer to above were peculiarly placed. The usual site for their nest is in a hollow tree or a deserted woodpecker's hole, but one of the nests I found was in the hayloft of a barn, the entrance being through a knot hole. A tunnel, 10 inches long, was then made in the hay and a slight enlargement hollowed out at the end where the eggs were laid. The other nest was in a pigeon house in the middle of the town, and the hawks and the pigeons raised their broods in perfect harmony.

There are, of course, numerous other species of hawks, not resident in the Eastern United States, that I am not able to describe, but they are all harmless with the exception of the duck hawk. This bird is a terror to the water fowl and is well known to those who live within its habitat.

All the small owls are to be protected.

The commoner species are the screech, the Acadian, or saw-whet, and the long eared. They are seldom seen in the daytime, except when startled from some secluded spot they have chosen, either in thick brush or in a hollow tree.

The barred owl, *Syrnium nebulosum*, is the commonest of the large species. He can be distinguished from the great horned owl by the absence of ear tufts, and his lighter color, being almost gray, while the latter is a dark brown. There is a great difference in their dispositions, however. The great horned owl is the most destructive of the *raptores*, eclipsing even the Cooper hawk, while the barred is harmless. The great horned owl eats poultry, all kinds of birds, rabbits, skunks, squirrels, and even members of his own family. He is a good fisher and does much damage to the trout ponds and brooks. The wily ruffed grouse falls a victim to his voracious appetite, and a turkey or a wood-chuck is none too large for him. I am glad he is becoming rare in this section. In the past 3 years I have not seen more than 7 or 8. A great deal can be done for game protection by killing this pest and the Cooper hawk, leaving the other species to increase and help out the work of destroying red squirrels and snakes. This will save annually thousands of dollars for the farmers, by ridding the fields of mice, grasshoppers, etc.

I hope no reader of RECREATION cares to shed innocent blood. The next time a hawk or an owl comes within gunshot notice whether or not it is on the black list, before shooting. I would feel more justified in killing a dozen robins, or blue-birds, or mocking-birds than one hawk.

Lorenzo Blackstone, Norwich, Conn.

CEDAR BIRDS AND SAPSUCKERS BENEFICIAL.

For the benefit of D. C. Clark, of Maine, who writes in September RECREATION, I wish to say that here in Connecticut, also, robins may be seen the year round, though there are few in winter, and they are rarely seen near the habitation of man. They hide in the dense pine groves for protection from the cold, and may be seen on warm, sunshiny days, sunning on the South side. They are shy during the winter and keep well under cover.

I wish also to extend a hand of congratulation to David Pratt, also of Maine, for his reformation. I hope he will do all he can to preserve the dear little birds that do so much good by destroying insects and lightening many burdens by their songs and beautiful ways.

When I was spending a vacation in Massachusetts in 1898 a farmer brought to me a cedar bird and three sapsuckers that he

had shot, saying: "They do us a great deal of harm and we never knew them to eat an insect of any kind." I disagreed, and on opening the stomachs found in the cedar birds a few berry seeds, part of a large spider, and wings and legs of many bugs. The sapsuckers' stomachs contained great numbers of ants, bugs and insects in various stages of digestion. The farmer was much surprised. He is but one of many who are entirely ignorant of the great amount of good that is done by the birds. I am glad RECREATION lends a helping hand for the protection of the dear little song birds.

W. G. Taylor, Derby, Conn.

A PECULIARITY OF COOTS.

I have noticed one thing in coot shooting that has never been satisfactorily explained to me. In shooting them at the head of Buzzard's bay, from boats, as they come flying overhead, if a shrill whistle is given they will instantly change their course, some of them dipping nearly to the water. I have often thought some of them were coming into the boat. If they are out of range they can often be brought within reach in this manner. Years ago this whistling used to be done through the fingers. Now most of the gunners use what is called the Deviline whistle. It makes noise enough to waken the dead. It is amusing to watch a flock of coot when the shrill note of the whistle breaks on the ear. They drop swiftly down and the flock breaks up as if struck by lightning. Once in a while, however, a flock pays no attention to the whistling. Why do they thus change their course? I have heard it said they perhaps mistook the sound for the cry of an eagle and so started down to the water for safety. How true this is I do not know, but I have repeatedly seen the sudden breaking up of a flock. Sometimes they separate, sometimes they bunch, but they always drop several yards, and if the whistling is done at the proper moment they always come nearer the boat. Perhaps so the reader of RECREATION can give an explanation.

Allen D. Hammond.

NATURAL HISTORY NOTES.

A few days ago a friend told me of the strange performance of a hawk with a live rabbit. He flew up about 30 feet with it and then dropped it, catching it again. This he did several times. Probably he was mellowing it, to make it easier to eat.

Another friend told of a rabbit that knew how to make use of a barbed wire fence. A hawk was chasing him and he ran under the fence. The hawk made a dash at him and he dodged to the other side of the

fence. Then the hawk rose in the air and early days told me he once left an elk carcass out all night without its being touched by coyotes. He could not carry the elk to camp the same night, so he killed it, skinned it, cut off the head, propped the carcass up on its legs and left it. The next morning he went back, expecting to find it eaten, but there it stood, with a ring of coyote tracks about it. After the head was cut off the neck had turned back toward the tail, making the strangest looking animal anyone ever saw. It was something new to the coyotes, and they wouldn't tackle it.

A. K. Boyler, Saline, Kan.

Frank L. Parkhurst claims the blue jay is an enemy of our smaller birds. While this bird may occasionally rob a nest, I do not believe his chief food at any time is eggs or young birds. In this section of Ohio jays are numerous, and I have never seen one rob a bird's nest. He shows a marked preference for acorns and beech nuts. From repeated observations and examinations of stomach contents I am convinced these nuts constitute the bulk of his food during the late summer and autumn; while at other times grain, berries and insects are largely eaten. No decrease of native birds can be attributed to the depredations of the jay and he should be protected.

I should like to learn the opinion of readers of RECREATION regarding the food of hawks. RECREATION and the L. A. S. are doing much good and deserve encouragement from every true sportsman and lover of nature. We are making it interesting for game hogs and will continue to do so.

Nat S. Green, Camp Dennison, O.

One morning last spring while out wheeling I heard a noise up in a tree and got off to see what it was. While I was looking into the tree a red squirrel ran down it, closely followed by a robin. When he was perhaps 2 feet from the ground he jumped and started for another tree. The robin kept right on him all the time, trying to peck him. Whenever it succeeded, the squirrel tumbled, then jumped up and ran on again. They soon reached the other tree and disappeared in the foliage.

I suppose the squirrel had stolen the robin's eggs or young and the bird was punishing him. Does any reader of RECREATION know if squirrels eat birds' eggs and young?

H. A. S., Saratoga Springs, N. Y.

I have a report from 5 reliable persons in Talbot county, Maryland, that they found and killed, last spring, a black

snake having a perfectly formed head on each end. The tail head was perfect except for the absence of a tongue and throat. The reptile could open and shut the mouth of this head and appeared to see perfectly from the natural-looking eyes. At the Smithsonian Institution, in Washington, we were told they have known frequent instances of two-headed snakes, but never a case where the second head appeared on the tail end. Are we alone in our snake story?

J. E. Tylor, Baltimore, Md.

Two seasons ago I was hunting in lower Florida and undertook to save the head of a buck for the purpose of mounting. On cleaning the head after skinning, that the skull might be saved, I was much surprised to find the interior of the throat, just below the base of the tongue, almost stopped up with large worms, or "wolves," similar to those often found under the skin of a rabbit's neck. These worms were large, and each one appeared to be embedded in a sac by itself. Is this a common occurrence? I would be pleased to hear from some of our deer hunters on the subject. J. E. Tylor, Baltimore, Md.

I see in RECREATION some inquiries as to how ruffed grouse produce that drumming sound. I once happened to see one in the act. I was concealed behind a clump of trees, trying to get a shot at a grouse with my rifle. In a short time a grouse came in full view. I fired at him, but did not hit him. The only effect was to cause him to jump about 6 inches. Then he marched about 12 yards to a big, flat rock, perched on the top of it, and, stretching up his neck and body to their full height, commenced to beat his sides with his partly outstretched wings. The mystery was revealed.

William C. Bell, Washington, N. J.

For a number of years I have felt sure it is not uncommon for quails in this locality to raise 2 broods in one season. On the 4th of September, 1899, at Lake Carey, on the farm of Mr. Knippenburg, 13 eggs were hatched. Six days later, on the same farm, in burning over a piece of land, a nest of 7 eggs was destroyed by fire.

H. M. Beck, Wilkesbarre, Pa.

An article in RECREATION on the shedding of deer horns says "the horns come off next the skull like the stem of a pumpkin." It is different on this coast. On deer there is left a burr, or knob, about one inch long. On elk the burr is 2 inches long. Both deer and elk drop their horns in March.

L. L. Bales, Juneau, Alaska.

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S. A. Smart, Chief Warden, St. Paul.

MONTANA DIVISION.

Professor M. J. Elrod, Chief Warden, Missoula.

NEW JERSEY DIVISION.

A. W. Van Saun, Chief Warden, Pompton Plains.

NEW YORK DIVISION.

A. E. Pond, Chief Warden, 124 Fifth Ave., New York City.

OHIO DIVISION.

L. H. Reutinger, Chief Warden, Athens.

OREGON DIVISION.

Robert Kelly, Chief Warden, Box 188, The Dalles.

PENNSYLVANIA DIVISION.

C. F. Emerson, Chief Warden, 189 N. Perry St., Titusville.

UTAH DIVISION.

Hon. John Sharpe, Chief Warden, Salt Lake City.

VIRGINIA DIVISION.

Franklin Stearns, Chief Warden, 13 N. 11th St., Richmond, Va.

WASHINGTON DIVISION.

J. S. Stangroom, Chief Warden, New Whatcom.

WISCONSIN DIVISION.

James T. Drought, Chief Warden, Milwaukee.

WYOMING DIVISION.

Dr. Frank Dunham, Chief Warden, Lander.

Applications for membership and orders for badges should be addressed to Arthur F. Rice, Secretary, 23 W. 24th St., New York.

LOCAL WARDENS IN NEW YORK.

County.	Name of Warden.	Address.
New York,	Conrad L. Meyer,	46 W. Broadway.
Livingston,	M. De La Vergne,	Lakeville.
Nassau,	Willet Smith,	Freeport, L. I.
Albany,	C. D. Johnson,	Newtonville, N. Y.
Allegany,	J. D. Holden,	Belmont, N. Y.
Broome,	M. A. Baker,	Whitney's Point, N. Y.
Cayuga,	H. M. Haskell,	Weedsport, N. Y.
Cortland,	J. A. Wood,	Cortland, N. Y.
Chemung,	Fred. Uhle,	Hendy Creek, N. Y.
Erie,	E. P. Door,	103 D. S. Morgan Building, Buffalo, N. Y.
Essex,	Marvin H. Butler,	Morilla, N. Y.
Franklin,	W. H. Broughton,	Moriah, N. Y.
Montgomery,	Jas. Eccles,	St. Regis Falls.
Oneida,	Charles W. Scharf,	Canajoharie, N. Y.
Orange,	E. J. Breeze,	Forestport, N. Y.
	Wilson Crans,	Middletown, N. Y.
	J. Hampton Kidd,	Newburgh, N. Y.
Rensselaer,	Capt. J. B. Taylor,	Rensselaer, N. Y.
Richmond,	Lewis Morris,	Port Richmond, N. Y.
Schenectady,	J. W. Furnside,	Schenectady, N. Y.
Suffolk,	F. J. Fellows,	Islip, L. I.
	P. F. Tabor,	Orient, L. I.
Tioga,	Geo. Wood,	Owego, N. Y.
Washington,	C. L. Allen,	Sandy Hill, N. Y.
Westchester,	George Poth,	Pleasantville, N. Y.
Essex,	H. E. Braman,	Keene Valley, N. Y.
Rockland,	A. Woodward,	Ramapo, N. Y.
Sullivan,	Ernest W. Kenne,	Mongaup Valley, N. Y.
Dutchess,	} A. B. Miller,	Jackson's Corners, N. Y.
Columbia,		Sanataria Springs, N. Y.
Broome,	John Sullivan,	Port Jervis, N. Y.
Orange,	Thomas Harris,	Madrid, N. Y.
St. Lawrence,	J. W. Aitchison,	Memphis, N. Y.
Onondago,	James Lush,	Penn Yan, N. Y.
Yates,	B. L. Wren,	Pawling, N. Y.
Dutchess,	Chas. H. DeLong,	Billings, N. Y.
Dutchess,	Jacob Tompkins,	

LOCAL WARDENS IN OHIO.

Stark,	A. Dangelesen,	Massillon.
Franklin,	Brook L. Terry,	208 Woodward Av., Columbus.
Cuyahoga,	A. W. Hitch,	161 Osborn St., Cleveland.
Clark,	Fred C. Ross,	169 W. Main St., Springfield.
Erie,	David Sutton,	418 Jackson St., Sandusky.
Fulton,	I. C. Berry,	Swanton.
Allen,	S. W. Knisely,	Lima.
Hamilton,	W. C. Rippey,	4465 Eastern Ave., Cincinnati.
Knox,	Grant Phillips,	Mt. Vernon.
Lorain,	T. J. Bates,	Elyria.
Ottawa,	Frank B. Shirley,	Lakeside.
Muskingum,	Frank D. Abell,	Zanesville.
Scioto,	J. F. Kelley,	Portsmouth.
Highland,	James G. Lyle,	Hillsboro.

LOCAL WARDENS IN CONNECTICUT.

Fairfield,	George B. Bliss,	2 Park Row, Stamford, Ct.
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County.	Name of Warden.	Address.
	Harvey C. Went,	11 Park St., Bridgeport, Ct.
Hartford,	Abbott C. Collins,	783 Main Street, Hartford, Ct.
(County Warden, care Conn. Mutual Life Ins. Co.		
Litchfield,	Dr. H. L. Ross,	P. O. Box 100, Canaan, Ct.
New Haven,	Wilbur E. Beach,	318 Chapel Street, New Haven, Ct.

LOCAL WARDENS IN NEW JERSEY.

Morris,	D. W. Clark,	Newfoundland.
Somerset,	G. E. Morris,	Somerville.
Morris,	Francis E. Cook,	Butler.
Passaic,	L. M. Lefevre,	Pompton Plains.
Sussex,	Isaac D. Williams,	Branchville.
Morris,	Joseph Pellet,	Pompton Plains.
Union,	A. H. Miller,	Cranford.
	C. M. Hawkins,	Roselle.
Warren,	{ Jacob Young,	{ Phillipsburg.
	{ Reuben Warner,	{

LOCAL WARDENS IN PENNSYLVANIA.

Venango,	G. D. Benedict,	Pleasantville.
Northumberland,	W. A. Keppard,	Shamokin.
Potter,	Byron Bassett,	Coudersport.
Crawford,	Jasper Tillotson,	Tillotson.

LOCAL WARDENS IN MICHIGAN.

Kalkaska,	W. H. Dunham,	Kalkaska.
Kalamazoo,	C. E. Miller,	Augusta.

LOCAL WARDENS IN WYOMING.

Fremont,	Nelson Yarnall,	Dubois.
Uinta,	{ S. N. Leak,	{ Jackson.
	{ W. L. Simpson,	{
Carbon,	Kirk Dyer,	Medicine Bow.

DISCOUNTS TO LEAGUE MEMBERS.

The following firms have agreed to give members of the L. A. S. a discount of from 2 per cent. to 10 per cent. on all goods bought of them. In ordering please give L. A. S. number:

Syracuse Arms Co., Syracuse, N. Y. Guns.
 Davenport Fire Arms Co., Norwich, Conn. Shot guns, rifles.
 Gundlach Optical Co., Rochester, N. Y. Photographic goods.
 Blair Camera Co., Boston, Mass. Photographic goods.
 Folmer & Schwing, 271 Canal Street, New York City. Photographic goods.
 The Bostwick Gun and Sporting Goods Co., 1528 Arapahoe St., Denver, Col.
 W. H. Langdon, Bridgeport, Conn. Sportmen's goods.
 New York Condensed Milk Co., 71 Hudson Street, New York City. Condensed products.
 Oneida Community, Kenwood, N. Y. Traps.
 Metz & Schloerb, Oshkosh, Wis. Moccasins, hunting shoes, etc.
 Novelty Cutlery Co., Canton, O. Pocket cutlery, ink erasers, etc.
 M. A. Shipley, 432 Market St., Philadelphia, Pa. Fishing tackle.
 Willis Arms & Cycle Co., Kansas City, Mo. Bicycles, athletic and sportsmen's goods.
 Percy Selous, Greenville, Mich. Naturalist and taxidermist.

EACH MEMBER SHOULD WORK.

All L. A. S. members should be busy in some line of work to advance the interests of game preservation. There is some game coming into this market all the time from adjoining states, in violation of non-export game laws, and I suppose

this is true as regards all the large game markets of the country. Game dealers here say the wardens of adjoining States are interfering more or less with the shipping of game, yet I see boxes on Water street containing prairie chickens, ruffed grouse and quails which have come from points outside of Illinois. All our members everywhere should report any information they may have to the proper officials of any violation of the game laws and see that offenders are prosecuted at once.

Mr. Loveday has never called meetings for members here, and we are not doing the work we should do. Railway and express companies should be seen and made to pledge themselves not to violate the laws of States having non-export laws.

I have gathered the market reports of game and find that several large cities quote all kinds of game, and much of it is reported in bad order. Let us get after the market hunters, have them reported where they are killing game, and let us report the condition of the markets, and let the public know where game is being sent from.

Maurice R. Bortree, 172 Washington Street, Chicago.

Your suggestions are sound and timely and I trust all League members will act on them promptly. We could prevent a great deal of the illicit traffic in game that is now being carried on if all members would only do their duty. I have repeatedly urged Mr. Loveday to call a meeting of L. A. S. members in Chicago and he has often promised to do so, but promises don't protect game. I should like to see him do some real work and produce some results.—EDITOR.

AN UP-TO-DATE WARDEN.

I have been exceedingly busy with the fishermen on Lake Erie. I am pleased to become a member of any organization for protecting birds, fish and game. I have been for the last 7 years fighting violations of the game laws in this State. I have liberated 2,600 of our native song birds that have been trapped and sold in the markets of the State, but I did not get the support I should have had in cases of this kind, as I had to prosecute almost every case myself. After conviction in a justice's court the case would be carried up. The attorney would then get in court without my notice, state in his petition that the defendant had had the bird years before the law was passed and the prisoner would be discharged.

A. W. Hitch, Fish and Game Warden, Cleveland, O.

You have certainly done a noble work in the interest of game and bird protec-

tion, for which you are entitled to the gratitude of every true sportsman and nature lover. I trust you will do everything possible to increase the membership of the L. A. S. among your friends.

EDITOR.

The second annual meeting of the L. A. S. will be held in this city on the second Wednesday of February, 1900. Eligible for membership therein:

All general officers of the League.

All chief wardens of divisions having 25 or more members.

All secretary-treasurers from divisions having 100 or more members.

All vice-wardens from divisions having 200 or more members.

All delegates chosen by the several divisions, and the chairmen of all standing committees.

A general meeting of the League will be held on the day following this annual meeting of officers and delegates, to which all members of the League are invited. At this meeting, topics of general interest to the League will be discussed, and it is hoped that a large attendance may be realized. Members who may determine to attend are requested to send notice to the Secretary at once, in order that a hall of suitable size may be engaged for the meeting. We hope to have at least 20 States represented in this meeting. We especially invite all local wardens to be present. It will greatly benefit the cause to have the members from various States and from various portions of each State meet, become acquainted, exchange views and ideas, and thus fit themselves for better and more effective work at home.

The Seattle Post Intelligencer recently published a photograph of 2 members of the Seattle Rod and Gun Club standing alongside of a great number of grouse they had killed, and the caption stated there were 150 of the birds. In another part of the same issue of the paper is a report that the same club is asking for the appointment of a game warden to protect the game in that vicinity. If this club would teach its members to quit shooting when they get enough, there would be no need of a game warden. If all the members of the club would join the L. A. S. and induce the other sportsmen of that vicinity to do so, and to co-operate with us, we could help them greatly in preserving the game.

I hope you are aware of my continued interest in and support of RECREATION, as evidenced by local subscriptions and local interest in the L. A. S.

Can truly say I have done all in my limited power during the past year, having written 8 or 10 articles for the local press, and hung posters in New Hampshire, Massachusetts and Connecticut during a recent trip. Hornaday's report to the N. Y. Z. Society has been of immense value to me. He sent me 6 or 8 copies. *Vive la RECREATION!*

Ernest Russell, Worcester, Mass.

The Vermont kicker has disgusted me not a little, and I am sorry any man should call down on himself the reproach of all fair-minded persons by talking too much before he knows "where he is at." Were one-half what he alleges true, I should have little respect for the L. A. S.; but his attack only gives every one a chance to see how much that organization has done. Sportsmen are liberal, fair, open-handed gentlemen. "Sports" are an entirely different breed. It grates on my nerves to hear a sportsman called a "sport."

A. L. Vermilya, Columbiaville, Mich.



HERE is a cut of the L. A. S. badge. It is made in gold, silver or bronze, and sells at \$2.50, 75 cents and 25 cents, respectively. In either metal it is an ornament and an honor to any man. Why don't you wear one and let the world know you are a game protectionist? If you pay your membership fee 10 years in advance you get a gold badge as a present.

Please find enclosed \$1 for my dues to the L. A. S. for 1900. My appointment as special game warden has had a great effect on people in the section of the country where I live. During the summer I did not hear a gun or see anyone or hear of anyone violating the game laws or trespassing on lands. I go up now unexpectedly twice a month, and the natives all behave well.

Anthony Woodward, M. D., American Museum of Natural History, New York.

The executive committee of the L. A. S. has adopted a resolution authorizing the secretary to make a present of a gold badge to each member who will pay his membership fee 10 years in advance. Now if you want one of these beautiful emblems, send in your \$10.

EDITOR'S CORNER.

RECREATION desires to be of the greatest possible service to its readers in every way. You are therefore invited to ask this office for any information you may want, on any subject whatever. If I cannot answer directly, I will endeavor to get the information, and reply at the earliest possible moment.

More especially if you are planning a hunting or fishing trip anywhere in the United States, Canada, or Mexico, let me know and I will tell you all that can be learned about the fish or game to be found in any such region, and as to the best means of reaching your objective point. In nearly every case, I can put you in correspondence with subscribers who live in the district in question.

If you do not see what you want, ask for it.

THE ANIMALS NOW KEEP OPEN HOUSE.

The new Zoological Park in this city was formally thrown open to the public on November 8th. Several hundred members and their friends attended the ceremony, having gone out from the city on a special train.

At the main entrance, Pelham Avenue and Southern Boulevard, W. T. Hornaday, Director of the Park, received Levi P. Morton, president of the society; Controller Bird S. Coler and Park Commissioner August Moebus. The gates were then formally opened to the public. Mr. Hornaday's assistants, wearing neat uniforms, were drawn up to welcome the visitors.

On the terrace in front of the Bird House a temporary platform and seats had been erected. There the opening exercises took place.

Professor Henry F. Osborn, vice president of the Zoological Society and chairman of the Executive Committee, made the address of welcome. He said in part:

"You are welcome to the opening of this park, which marks another step of progress toward the great New York of the future. What our museums are doing for art and natural science, this park and its fair botanical companion up the Bronx will do for nature, by bringing its wonders and beauties within the reach of thousands and millions of all classes who cannot travel or explore.

"We must acknowledge to-day the gifts of the liberal men and women of this city who have thus far contributed about \$150,000 toward the plans, buildings and animals, while the taxpayers, in the good judgment of the Mayor and the Board of Estimate, have contributed an equal amount toward the paths, grading, drain-

age, fences and pavilions. The final plan is an extensive one befitting a great city and a generous people."

Controller Coler and August Moebus, Park Commissioner of the Borough of the Bronx, made brief responses.

Then Levi P. Morton, in the name of the city and the New York Zoological Society, formally declared the park open.

Here is a list of completed buildings and other installations for animals:

Mule Deer Range and House.
Fallow Deer Range and House.
Axis Deer Range and House.
Ducks' Aviary.
Flying Cage.
Aquatic Birds' House.
Black-tail Deer Range and House.
Virginia Deer Range and House.
Red Deer Range and House.
Caribou Range and House.
Moose Range and House.
Elk Range and House.
Wolf Dens.
Fox Dens.
Aquatic Mammals' Pond.
Otter Pool.
Antelope Range and House.
Prairie Dogs' Enclosure.
Burrowing Rodents.
Small Mammal House (temporary).
Reptile House.
Crocodile Pool.
Bear Dens.
Beaver Pond.
Buffalo Range and House.

Living animals in the collections:

Mammals,	43 species,	157 specimens.
Birds,	36 "	175 "
Alligators,	1 "	16 "
Lizards,	13 "	71 "
Turtles,	18 "	94 "
Serpents,	36 "	293 "
Batrachians,	10 "	37 "

Total 157 species, 843 specimens.

BOIL DOWN YOUR NAME.

The fad of the day for long-drawn-out personal names is a trial to readers, writers, editors, compositors, proofreaders, and to all who have occasion to read, write or speak such names. Everyone admits that brevity is the soul of wit, and that the writer who uses the shortest words, the fewest of them, and the shortest sentences is best liked and most widely read and quoted; yet many of these same writers string out their own names to such a length as to try the patience and the memory of the reader and the speaker.

Tom Hood, J. G. Whittier, U. S. Grant and J. G. Blaine are spoken of millions of times where William Raphael Doublestock, Milton Tennyson Brown or Makepeace Thackeray Miliken would not or could not be recalled once. C. A. Dana, A. B. Frost and R. F. Zogbaum will get their names into print millions of times where the busy editor, reviewer or critic would

pass by the long-drawn-out cognomens of the more ambitious Thomas Livingston McSwott, Nathaniel Hawthorne Langworthy or Washington Hannibal Timberlake. Even where such names are put down by the reporter, the editor frequently blue pencils them for want of space.

If you want your name carved on the tower of fame, if you want it to go thundering down the ages, boil it down so busy people can remember it. Abbreviate it so they can speak it glibly.

With this issue RECREATION installs a new department, devoted to forestry. It is under the editorial supervision of Dr. B. E. Fernow, Director of the New York State College of Forestry, in Cornell University, assisted by Dr. John Gifford, of the same institution, and nothing further need be said as to the high character and great value of the material which will appear in these pages from month to month. Dr. Fernow has devoted the best years of his life to the study of forestry, and no one in this country occupies a higher position in that science than he. Readers of RECREATION are invited to contribute to this new department any information they may have that could add to its interest and value. Short notes and items are preferred, but longer articles may be used from time to time. Let us make this one of the most interesting and important features of RECREATION.

The disgraceful and uncivilized method of deer hunting which is practiced on Long Island during 4 days in November of each year has resulted in another death. On November 3d William Rudolph fired a charge of buckshot into the head of his brother-in-law, Peter De Graff, and killed him almost instantly.

It has long been understood that any man who takes a position on one of the firing lines which are formed during these open days on Long Island carries his life in his hand, and only the more reckless and thoughtless hunters ever engage in this so-called sport.

I trust the New York legislature will soon pass a law providing for severe punishment of any man who "accidentally" kills or wounds a human being while hunting.

In the death of Mr. Robert C. Alexander, editor of the Mail and Express, the cause of game protection loses one of its best friends and most earnest workers. He has for years been prominent in various movements intended for the promotion of clean sport. He was at one time president of the Adirondack League Club, in which

he did a great deal of valuable work. He was a member of the L. A. S., in which he was also an earnest worker, and was a member of the committee on legislation.

He wrote and printed, in the Mail and Express, a number of strong articles in the interest of the League and of game legislation at Albany. He was always ready to do anything he was asked to do, and his death is a severe loss to the League. He leaves hosts of friends to mourn his early departure.

The RECREATION group of birds, mammals and reptiles in the New York Zoo Park now numbers 52 specimens. Let us swell the list as fast as possible. Who will be the next to furnish a specimen, or a number of them? Please communicate with this office on this subject. It is to the interest of every friend of RECREATION and to every friend of nature that the collection should grow as fast as possible, and especially that the RECREATION group should be a great feature of it.

"Much that is intended as good effort in heaping disgrace on the game hog is ill advised and worse considered."

So says the editor of the A. D. G. H. He don't like to have his pets abused.

A Munson Typewriter, listed at \$100, for 75 yearly subscriptions to RECREATION. This is one of the high grade standard machines, and does just as good work as the Remington or the Smith Premier. A rare opportunity. Don't miss it.

RECREATION is now comfortably housed in its new quarters, 23 West Twenty-fourth street, and all its friends are cordially invited to call and inspect the new home. The latch string is always out.

Bilkins—What's the matter with that dog of yours? He looks poor.

Gilkins—Indigestion. I call him Dewey and the neighbors have been overfeeding him.—Ohio State Journal.

"Mr. Fodderingham talks about his new autocart all through each meal," remarked Miss Bellingham.

"Yes; he's a regular autocart of the breakfast table," commented Miss Goldsborough.—Judge.

"Now, William, if a bicycle makes three revolutions a second, how many will it make an hour?"

"Say! I ain't no bicyclopedia."

PUBLISHER'S DEPARTMENT.

MY EXPERIENCE WITH THE GUN BORE TREATMENT.

Some months ago I sent a .30-40 Winchester rifle to the Gun Bore Treatment Co., 9 Warren Street, New York City, to be treated by their well-known process for preventing rust. I have recently had an opportunity of giving this gun a severe and practical test. I took it to Newfoundland, where I carried it in a canvas case, and when making a trip up the Humber river, in canoes, it rained all day. The gun case was, of course, thoroughly wet, and on reaching camp late at night I did not take the gun out of the case. The next morning when I started out I was surprised to find that the outside of the gun barrel and the lockplate were badly rusted. I at once lost faith in the Gun Bore Treatment Co., but on my return home I got some fine pumice stone and rubbed off the rust. To my astonishment it left the barrel in exactly the condition it was when I left New York. The rust had not penetrated the barrel a particle, and, in fact, had not passed through the coating formed by the acid with which the gun had been treated.

Every hunter knows that to carry a gun in a wet case, and especially to leave it in such a case over night, is about as severe a trial as it can be subjected to. If anything will rust a gun a wet case will do it; yet my gun is now in as fine order as when it came from the Gun Bore Treatment people. The rubbing I gave it with the pumice stone would have taken the ordinary browning off the barrel entirely, yet as I have said, it did not touch the brown put on by this chemical process. I can therefore recommend the Gun Bore Treatment Co.'s process much more strongly than heretofore.

EASTMAN'S NEW CARTRIDGES.

A recent announcement by the Eastman Kodak Company is one which will be of interest to kodakers everywhere, and when it becomes generally understood will turn the scale of many a hesitating buyer in favor of the kodak. If, in the past, there has been one strong point that could be made against the kodak it was the unavoidable waste of film which occurred when one wished to make but one or 2, or even a half dozen, exposures. This anti-film argument will no longer be valid, for the Eastman people are now furnishing cartridges of 6 exposures each for all kodak sizes except the $1\frac{1}{2}\times 2$

Pocket, and cartridges of 2 exposures each for $3\frac{1}{2}\times 3\frac{1}{2}$, 4×5 , and 5×7 . Thus equipped the amateur can work his instrument with convenience and economy, whether it be for 2 exposures at home or for 100 pictures on his vacation. Just at this season of the year, when home portraiture, both by time exposure and flashlight, is so much in vogue, the small rolls will be highly appreciated. They load in daylight in exactly the same manner as the dozen exposure rolls do, thus removing all need of the dark room except for developing. This is a long step in advance for film photography, and is one which every amateur will surely appreciate.

A SILVER REEL.

The Shakespeare reel is to all fishing reels precisely what the Bard of Avon is in the poetic firmament—without a peer. For accurate long-distance bait-casting it leaves nothing to be desired, and its splendid performance is the result of a mechanical construction rarely encountered outside of a fine chronometer. It is made throughout by hand, and in its various parts the range of variation in size is less than 1-1000 part of an inch. From the perfectly poised spool of the Shakespeare reel the line flows smoothly and swiftly, telling by its eloquent silence of the conquest of friction, while a simple, automatic device insures the uniform distribution of the line along the spool. The crank is ever in perfect balance and cannot work loose. All bearings are ground to the acme of accuracy and on the finest material only is such workmanship expended as enters into the Shakespeare reel. This reel is a quadruple multiplier, is beautifully finished in triple silver plate, oxidized, and each one is sent out in a fine chamois lined orange leather case. It is made by William Shakespeare, Jr., Kalamazoo, Mich. Write for circulars and mention RECREATION.

ANOTHER N. Y. CENTRAL EXPRESS.

The "Pan-American Express" train of the New York Central was put in service in both directions between New York and Buffalo on May 7, 1899, and was so named in honor of the great Pan-American Exposition to be held in Buffalo in 1901.

The main object of this train is to furnish the best possible night service between New York and Buffalo, Rochester,

Syracuse, Niagara Falls and Toronto, the leaving time at either end of the line having been so arranged as to permit patrons to dine leisurely at home or at their hotel and have ample time to take the train and arrive in New York or Buffalo in time for breakfast at the usual hour and before the business of the day begins.

The equipment of the "Pan-American" Express consists of the most modern coaches and sleeping cars, built by the Wagner Palace Car Company at their works in Buffalo, and of the strongest possible construction, combined with an ease of motion that makes the trip a positive pleasure.

William Read & Sons, the old-time gun and sporting goods dealers, 107 Washington street, Boston, announce a new 3-barrel gun under the name of the "Neumann." It is a genuine novelty by reason of the fact that the rifle barrel takes the new .30-30 smokeless cartridge, either full metal jacket or soft-nosed bullet.

This gun has a top lever action, is carefully made of fine materials, and is sure to become popular at once. The fact that this is handled by William Read & Sons is a guaranty to every sportsman who knows that house of its high quality. Anything these people put out can always be guaranteed at sight or without sight, and their word is as good as a bank draft every day in the year. It is a pleasure to do business with them, and a greater pleasure to advise my friends to buy from them. Write Read & Sons for a circular of this new gun and say you saw it in RECREATION.

Stanley Waterloo, of the Chicago Press Club, recently told this story:

"I believe the man who was more afraid of advertising something for nothing than any newspaper man I have ever seen was John Knapp, of the old St. Louis Republican. He hated to print a doctor's or lawyer's name for fear he would give them free puffs.

"One time there was mention made in the paper of a man having died of Bright's disease of the kidneys. Old man Knapp hunted up the copyreader.

"'What do you mean,' he said, 'by running in the name Bright in our columns?' He is not an advertiser in our paper and is not entitled to a notice unless he pays for it.'"

Carleton's Digest of the Inland Fish and Game Laws of the State of Maine is now ready for delivery, and costs only 12 cents in paper, 20 cents flexible cloth. It contains all the fish and game and forestry laws of the State of Maine, with full explanations on all disputed points as to the

construction of these laws, with full quotations of all the decisions of the Supreme Judicial Court on fish and game laws; with forms for petitions to close streams or lakes to fishing and complaints in all fish and game matters. It is a book of 48 pages that will be appreciated by lawyers, trial justices, wardens, guides, sportsmen and all interested in fish and game matters in Maine. Mr. Carleton, the author, is chairman of the Commissioners of Fish and Game, and his address is Augusta, Me.

It affords me great pleasure to testify to the practical usefulness of The Barger Sight, which is advertised in RECREATION as an attachment to shot guns. I have used it on all my recent hunting trips with great advantage for small game, such as rabbits, birds, etc., and it encircles the aim wonderfully, before the eye and the barrel, securing an almost infalible aim with the best and most satisfactory results. I can therefore confidently recommend this sight to all shooters. I am sure any man who uses one will find he cannot do without it.

August Obrock, 130 E. 126th Street, New York City.

W. T. Hornaday, the Director of the Zoological Park, has prepared and issued a guide book intended for visitors to the Zoo which is a luxurious work of art. It contains a great fund of valuable information regarding the creation of this wonderful natural history rendezvous, and is a credit not only to Mr. Hornaday, but to the Zoological Society as well. It is embellished with a large number of beautiful half-tone cuts of the buildings and of the animals in the park, and has a series of maps and diagrams which enable any one, even a stranger in the park, to find all objects of interest readily. It is a book of 108 pages, bound in neat boards, and sells at 25 cents a copy. It is well worth \$1 to any one who has a taste for natural history, whether he may ever hope to visit the park or not. The book was printed by the Trow Co., No. 201 East 12th St., New York, who are also entitled to great credit for the careful and artistic manner in which the work has been done.

Orders should be addressed to W. T. Hornaday, Director, 183d St. and Southern Boulevard, New York.

Send 10 cents in stamps to W. S. Howell, G. E. P. A., C., M. & St. P. Ry., No. 881 Broadway, New York, for a book of amusing incidents and funny stories of railway life, issued by the Passenger Department of the Chicago, Milwaukee & St. Paul Railway. Mention RECREATION.

Here is a cut of the Peabody carbine which I am offering for 12 subscriptions to RECREATION. This is an interesting relic of a type of weapon which 25

The shooting in Iowa, Minnesota and South Dakota is good, as the rainfall in all these states was abundant. The best localities for chicken and duck shooting are



years ago was extensively used in military service. It will do fairly good work yet, and is well worth the price to anyone collecting old arms. You can get the 12 subscriptions in an hour, in any live town.

I have recently made a hunting trip in Newfoundland, after caribou. Before starting I ordered from H. J. Putman & Co., 26 Hennepin Avenue, Minneapolis, Minn., a pair of their chrome tanned calf skin hunting shoes, and gave them a most thorough and severe test. I tramped many miles over the moss-covered, water-soaked marshes, where the caribou range, yet these shoes were practically impervious to water and my feet were almost as dry at night as in the morning. It is a pleasure to be able to advise sportsmen who may be in need of a good footgear to communicate with Messrs. Putman & Co.

on and tributary to the lines of the Chicago, Milwaukee & St. Paul railway. A copy of a recent publication issued by the passenger department of that road can be had on application to Geo. H. Heafford, General Passenger Agent, Chicago, by enclosing 3 cents in stamps for postage, and mentioning RECREATION.

J. H. Barlow, manager, Ideal Manufacturing Company, New Haven, Conn., has issued his new catalogue No. 12, which contains a great deal of new matter of interest to all shooters. Every reader of RECREATION should have a copy of it and should examine especially the new information given on the pages 37, 38, 39, 41, 42, 44, 45, 46, 63, 65, 70, 80, 106, 107, 109. In writing for the book, please say you saw it mentioned in RECREATION.

We received the set of dishes from Higgins and Seiter, and are much pleased with them. They are well worth the time spent in securing the subscriptions.

W. D. Grimes, North East, Pa.

A WAY THEY HAVE.

"The sun was setting in the West,
Just at the close of day"—
So runs the song, no doubt it's true,
Because nobody ever knew
The orb to let
Itself get set
In any other way.

"The stars were shining over head
And night her sable wings had spread,"
According to her song.
Why should we doubt the singer, say?
For isn't that, in fact, the way
They do it right along?

"The gentle breezes softly blew,
The autumn day was fair;"
Ah, well, indeed, the singer knew,
For on such days what else is there
The gentle breeze can do?

—Chicago Times-Herald.

PURE AND IMPURE FOODS.

EDITED BY DR. JAS. WEIR, JR.

Author of "The Dawn of Reason," "Suicide in the United States," "Socialism Among Bees," "The Antiquity of the Human Race," etc.

"What a Man Eats He Is."

A NEW RACE OF MEAT EATERS.

Until a comparatively recent date the Japanese confined themselves to an almost exclusively vegetable diet. It is true that they were not strict vegetarians, for they occasionally ate meat; yet, so rarely did flesh appear on their tables that the exception only served to prove the rule. Since their entrance on the stage as one of the world-powers, however, there has been a change; they have eaten meat in abundance and "have found it good."

In recent years the demand for meats has been far in excess of the supply, hence the Japanese government has been, and is now, trying to increase the meat supply of the empire by importing cattle, sheep and hogs. Commissioners have been sent to the great cattle-raising districts of the North and Southwest, in order to study the methods of the ranchmen and cowboys. They have also experimented with cattle in order to determine the breed that is best adapted to their country, both as to climate and as to grazing. It will be exceedingly interesting to note the change that will occur in the physical and psychical organisms of this people from this change of diet; and that there will be changes there can be no doubt. Of course these modifications will be slow, and to a certain extent inappreciable, but they will make their appearance nevertheless in due course of time.

SUGAR AS A BRACER.

Many years ago, when quite a lad, I discovered that a few lumps of sugar carried along in my pocket and munched during the course of a day's hunt banished hunger and fatigue and proved a most efficient "bracer." At that time I had no idea that I had discovered a valuable physiological truth, and, beyond telling my companions of my discovery, said nothing about it. It seems, however, that this fact has recently been the subject of experiment by German scientists, who regard it as highly important and very valuable. A recent dispatch to the New York Sun states that:

"Germany has just completed elaborate experiments with sugar as a food for troops. The object was to test the advantages of a sugar diet in cases where great exertions were to be made within a brief period. According to the reports of experiments in various army corps a favora-

ble result has been secured. Professor Pfuhl, head of the physiological laboratory of the army department, states it has been proved that a sugar diet increases the muscular power in a comparatively short time, considerably shorter than does the white of an egg. The effect of the latter, however, is more lasting, though sugar has the advantage of being much cheaper. The extraordinary rapidity with which sugar is absorbed by the body explains its rapid effect on the nervous system, which is of the greatest importance in all cases where speedy bodily recuperation is desired, as in long distance marching.

"Professor Pfuhl, in a series of experiments on himself, found that after long walks 3 or 4 lumps of sugar removed all feelings of lassitude, and to a certain extent restored the elasticity of the muscles, this effect being frequently produced in a quarter of an hour.

"Professors Senator and Munk, of Berlin University, have come to the conclusion that sugar has a high nutritive value as the purest and most easily soluble hydrate of carbon. A certain minimum of albumen, differing according to individual cases, must be supplied in any case and cannot be replaced by sugar; but sugar as a food is valuable, both on account of its cheapness and the ease with which it is manufactured."

THE NUTRITIVE CONSTITUENTS OF MEAT, EGGS, ETC.

In former issues of RECREATION we have seen what the vegetarian school had to say in regard to the proper diet. It is only fair to present also the views of the meat-eaters. The following is a brief digest of the most important points of Professor Atwater's thesis on the mixed diet.

The chief nutritive constituent of lean meat, fish and eggs is protein in the form of certain compounds. These proteids are exceedingly valuable in repairing waste, and in building up new tissue. Meat, eggs and fish are rich in protein, hence are of the utmost importance in formulating a proper diet. The albumen and casein of milk are also protein compounds, and protein compounds occur in corn, beans, potatoes and, indeed, all kinds of vegetables. Hence, all of these substances are of value as foods. Professor Atwater seems to prefer the term "nitrogenous compounds" when speaking of

these substances. "Proteids" is, however, a better name for them. Meat, as served for culinary purposes, contains also the gelatinoids, which are the principal ingredients of tendon and similar tissues. These substances do not possess much food value. The various "extractives" (so called because they are extracted from flesh by water), such as creatin, creatinin, carnin, etc., are likewise of little value as foods. Finally, the fats, which are familiar to us in the form of tallow and lard, in butter, and in the various vegetable oils, are valuable on account of their heat-producing qualities.

Another exceedingly important food constituent is the carbohydrate. Potatoes, wheat and corn, as well as sugar cane and sorghum, are rich in carbohydrates. Starch and sugar are similar in chemical composition, both being carbohydrates. In certain organs of the body carbohydrates are to be found; for instance, in the glycozen, or animal starch of the liver.

Summing up, the principal nutritive ingredients are protein, fats and carbohydrates. Add to these certain mineral matters, such as the various phosphates, sulphates and chlorides, and we have the sum total of all the ingredients necessary for the proper alimentation of the body. These nutritive ingredients are only to be obtained in the correct proportion in the mixed diet, i. e., meat, eggs, fish, milk, the cereals and vegetables.

THE COURSE DINNER AND ITS DANGERS.

I am inclined to believe that the greatest danger of the course dinner is the wines that are served with the courses. These wines are mingled with the food, thus establishing favorable *foci* for fermentation. Nine-tenths of the fermentative dyspepsias met with by fashionable physicians, that is, doctors whose *clientele* is made up of the so-called 400, are directly due to this wine-drinking habit. As far as the course dinner *without* wine is concerned, there is no danger. In my opinion, food should always be served in courses, with the smallest amount of liquids possible. When food is taken into the stomach after this manner the gastric juices are not diluted and can act in a normal way in disintegrating food-particles and assisting chymification. A writer in the Cincinnati Enquirer says:

"Thousands of people dig their graves with their teeth every year. The number of prominent men who succumb annually to indiscreet and excessive eating is positively astounding. Recently attention has been directed to the serious illness of Vice-President Hobart, and it is claimed he is a victim of the seductive banquet table. There is a loud demand for reform in the characters of evening course din-

ners, and the diners-out should evince a deep interest in the matter. Few men pay proper attention to the stomach and their digestive organs. If they would follow the simple rules of living much of the dyspepsia could be avoided. One great difficulty is that so much wine is usually drunk with the viands at a banquet that it causes fermentation, and indigestion and possibly gastritis are the inevitable results.

"A distinguished writer has recently declared that elaborate course dinners are a standing menace to the health of those who indulge in them. He asserts that champagne is the most objectionable of any of the wines, but most, if not all of them, should be let alone. Nor are the regular banqueters the only class of people who suffer from the bad effects of injudicious eating. Many society women are confirmed dyspeptics. Medical men generally agree that the stomach should be absolutely clean before food is taken into it. The simplest method of attaining this is by drinking 2 or 3 glassfuls of water an hour or more before each meal. The water should be either tepid or moderately cool; not so cold as to chill the stomach or so warm as to cause perspiration."

THE PROCESS OF ALIMENTATION.

There are 2 uses of food: (1) to form new material and to repair waste; (2) by oxidation to yield heat in order to keep up bodily warmth and muscular vigor. In making the tissues and fluids of the body, the food serves for building and repair; in yielding warmth and muscular activity, it serves as fuel. The various nutrient ingredients act in different ways. The principal tissue-makers are the albuminous proteids, for these make muscle and supply the albuminoids of the blood, milk and other fluids. The carbohydrates and fats are the chief fuel ingredients. They are either consumed at once or they are stored up as fat for future consumption and will be used when necessary.

The albumen compounds, such as the albumen of eggs, the casein of milk and cheese, the gluten of wheat, and the myosin of meat, are changed into the albuminoids and gelatinoids of the physical organism. Muscle, tendon and cartilage are formed from albuminoids. The albuminoids of food also serve as fuel. Says Professor Atwater: "A dog can live on lean meat; he can convert it into muscle, heat and muscular power. The gelatinoids of food, as the finer particles of tendon and the gelatin, which is dissolved out of bone and meat in making soup, though somewhat similar to the albuminoids in composition, are not tissue formers. But

they are used as fuel, and hence are valuable nutriment."

The carbohydrates, such as the starch of wheat, potatoes, oats, etc., and sugar, are fuels, and yield heat and power when taken up in the process of alimentation. The fats are concentrated fuels and serve the same purpose as the carbohydrates. The surplus fat is stored up in the body and is kept as a reserve fuel in the most concentrated form.

THE NEED OF ECONOMIZING IN FOOD.

People will economize in their amusements, in clothing, in their habitations, but they will not economize in food. This is mainly the result of ignorance.

Persons who are exceedingly economic in the purchase of clothing and other expenditures do not, and in many instances cannot, practice the same economy at the markets. They frequently pay \$1 to \$2 a pound for the protein of the meat and other family foods which they use, when it might be obtained, in forms equally wholesome and nutritious, for 15 or 20 cents a pound. The difficulty is that in comparing different food materials with respect to their cheapness or dearness, we are apt to judge them by the prices a pound, quart, or bushel, without much regard to the amount of actual nutriment they contain. We endeavor to make our diet suit our palates by paying high prices in the market, rather than by the skilful cooking and tasteful serving at home. We buy more than we need, and, what makes the matter worse, it is frequently those who need most to save who are the most wasteful.

THE NUTRITIVE VALUE OF CERTAIN FOODS

A sirloin steak, 5 ounces of wheat flour bread and a quart of milk contain about the same quantity of nutritive matter. Of these substances milk comes nearest to being a perfect food, because it contains all the ingredients necessary for the nourishment of the physical organism. "Bread," says Professor Atwater, of Wesleyan University, "made from wheat flour will support life. It contains all the necessary ingredients for nourishment, but not in the proportions best adapted for ordinary use. A man might live on beef alone, but it would be a one-sided and imperfect diet.

Meat and bread together make the essentials of a healthful diet. Such are the facts of experience."

THE VALUE OF NUTRIENT INGREDIENTS IN CALORIES.

The unit for measuring energy, as developed by the nutrient ingredients of foods, is called a calorie, i. e., the degree of heat necessary to raise the temperature of a pound of water 4 degrees Fahrenheit. The following estimate is considered correct for the average degree of heat and energy in one pound of each of the various nutrient ingredients:

	Calories.
Protein	1.860
Fats	4.220
Carbohydrates	1.860

WHOLESOME AND DIGESTIBLE COURSE DINNER.

Of the many course dinners recently submitted to the readers of the Cincinnati Enquirer, I think the following the safest and the most wholesome:

Blue Points.
Salted Almonds.
Chicken Broth, with Rice.
Sliced Tomatoes.
Grilled Pompano with Parsley Butter.
Saratoga Chips.
Roast Quail on Toast.
Brussels Sprouts.
Fruit in Season.
Cheese. Crackers.
Coffee.

AN EASY TEST FOR FLOUR.

Arthur J. Burdick in October What to Eat gives the following tests for flour:

First, the color is an indication of quality. A very white—bluish white—flour with fine black specks it not good. A yellowish white is a good color. Take a handful of the flour and compress it in your hand. If it retains its shape when the hand is opened it is a good sign. Throw a small lump against a smooth perpendicular surface; if it falls like powder it has no life; if it adheres in a lump it is all right. When wet and worked between the thumb and fingers it should work dry and elastic; if sticky and soft do not buy it.

"To our silent heroes," little Willie read from the memorial bronze. "Popper, what are silent heroes?"

"Married men," said popper.—Indianapolis Journal.

FORESTRY DEPARTMENT.

EDITED BY DR. B. E. FERNOW,

Director of the New York School of Forestry; Cornell University, assisted by Dr. John N. Gifford, of same institution.

TIMBER DESTRUCTION.

C. E. RUSK.

Most people seem woefully apathetic in regard to timber destruction in the Pacific Northwest. Year after year the magnificent forests of Oregon and Washington go up in smoke. We are dazzled by the wealth of the Klondike, yet the value of the timber destroyed on the coast this year, by fires alone, will not fall far short of the output of the Northern El Dorado.

Last year the fires in the Cascades were frightful, and the devastation will no doubt be as great this season. Every summer seems to increase rather than diminish it. It is but a matter of time when the great forests, which are now our pride, will be a memory, and the Cascade range but a desolate, barren chain of treeless ridges. Then will the cold mountain streams run dry, and the valleys below parch in the burning sun of summer, or be torn by the unrestrained floods of spring.

In August, 1897, from the summit of Mt. Adams, I saw at least 12 big fires raging at the same time. Although many miles away, some of them appeared close at hand, and flames could be distinctly seen leaping from tree to tree and high in air. From one fire, directly North of the mountain, a solid column of black smoke rose, straight into the sky, to a height much greater than the top of the big peak. Picture a mass of inky smoke shooting up nearly 3 miles, and you can, perhaps, form some idea of the conflagration that engendered it. Such heat could have meant nothing less than the complete ruin of a good part of the dense forest that skirted the North base of Mt. Adams. And when we consider that scores of such fires rage every summer in the Pacific Northwest we can faintly realize the loss involved.

There are countless hills in the Cascades once clothed by luxuriant trees that now stand bare of foliage, with only here and there a black stump, or the tall, white ghost of some stately fir, as mute reminder of past beauty. So fierce is the heat of a forest fire that often a few minutes will suffice to sweep a whole mountain side.

And no one seems to care! Year after year the destruction goes on, with scarcely a hand stretched out to check it, and with hardly a voice raised in protest. Per-

haps when too late we may awake to a realization of the value of our forests.

And who, it may be asked, is the cause of all this devastation?

I answer, prospectors, hunters, stockmen and sightseers. All must bear a share of the blame. Probably not $\frac{1}{2}$ of the timber fires are started by accident. A majority of them are set deliberately, or, we might say, criminally. I remember standing once on a high ridge and looking across Lewis river canyon to the opposite slope, about 10 miles. Suddenly a tiny thread of smoke rose above the trees and rapidly increased in volume. In a short time another column rose a few hundred yards away, and a little later still another, and so on until there was a whole line of small white pillars floating skyward and growing larger all the time. Some vandal was going out of the canyon, setting fire as he went. By night that slope was a seething, roaring hell of flame.

The prospector applies the match under the delusion that the country will be easier to explore after it has been "burned off." He does not stop to consider the possible damage to the water supply—the miner's main dependence. The hunter starts fires because he imagines he can afterwards traverse the woods, in quest of game, with less difficulty. It never enters his head that when the forests are gone the game will go also. The stockman hopes that after the underbrush has been swept away grass will spring up to take its place. The sightseer creates a blaze either for one of the purposes named above or simply to witness the destruction his own hand has caused.

Briefly stated, then, most forest fires are started either to make traveling and range better, or out of pure destructiveness. Of course there are many in the classes named who take no part in timber destroying, and there are still others who carelessly but unintentionally let fires get beyond their control. Timber fires often escape from land clearings; but, as before said, most of them are probably set deliberately. The impression that "burning off" makes better range and traveling is, in the main, erroneous. True, in isolated instances, or in places where the big timber is sparse and the underbrush heavy, a fire may cause a better growth of grass and easier traveling. In such cases, the large trees are generally too scattering to burn. But in

heavy forests, where no grass grew before, the range will be no better after than before a fire. The ground will simply be covered with an ash deposit, bearing little vegetation. All who have gone through such a place—among great piles of logs—will agree that fire is, on the whole, a detriment to good mountain travel, except where the heat has been so fierce as to sweep away everything.

There are many arguments against the ruthless destruction of our forests, but it is not necessary to repeat them here. Taken all in all, any slight individual benefits that may arise from the setting out of fires are as nothing compared to the awful desolation that will follow the annihilation.

What is to be done to stop this wholesale ruin? It is a fit subject for future study and investigation. We must have more stringent laws and rigid enforcement. Let all who feel that we owe any duty to the future take up the fight and push it vigorously. Unless something is done the coming generations will turn to history and read with wonder and regret of the forests that have been.

GAME AND THE FOREST.

The preservation of game and the perpetuation of the forest go hand in hand. Many birds and mammals are dependent on the forests for food and shelter, and on the other hand forests are formed from the seeds which are often carried from place to place by animals. As the protector and source of food to game the forest deserves more care from sportsmen than it has ever yet received in this country. Hunters are often guilty of negligence which causes fires in the woods, thereby destroying the game which gives them pleasure. More game is destroyed by fire than is killed by hunters. Fire not only kills the animals of the woods and burns the nest of birds, but at the same time robs them of their food supply.

One can wander many miles in this country over burned areas without seeing a single thing except perhaps insects. On all sides there is nothing but a sea of snakes, rabbits, foxes and other animals, friends and enemies alike, chased by the heat and smoke of a forest fire. The work of the game warden and fire warden should be combined.

The Indian of our West burns the underbrush to facilitate hunting. This may help for a time, but soon ruins all sport, and brings both game and food supply to a fatal termination. Game laws are practically useless while fires are allowed to burn. The forestry movement in this country should be able to count the hunters among its staunchest supporters.

Any questions in reference to the man-

agement of woodlands will be cheerfully answered, if possible, by the editor of this department.

BOTANIC GARDEN NEEDED.

The American government should not fail to establish, somewhere in the tropical islands to the South of us, a botanic garden and laboratory where Northern students may go for a time to study the peculiar conditions which exist there. The Dutch have such a place at Buitenzorg in Java, which has been visited by the majority of famous botanists in Europe. In the Island of Jamaica there are beautiful gardens and large plantations of cinchona and eucalyptus trees. From the bark of the former quinine is manufactured, while the other yields a valuable medicinal oil and at the same time reduces the chances of malaria by drying the ground which is penetrated by its roots. The Isle of Pines would be a splendid location for such an institution, owing to the healthfulness of its climate, richness of flora, accessibility to the United States and nearness to the famous sea-gardens which teem with interesting forms of marine life.

SOME PECULIAR WORD DERIVATIONS.

The word "book" comes from the old Germanic word for "beech," because the Anglo-Saxons and Germans wrote on beechen boards before paper was manufactured. The word "library" comes from the Latin "liber," the bark of a tree. The word "lumber," it is said, comes from the word "Lombard," because the Lombards were the first pawnbrokers, and lumber originally meant rubbish of any kind. The Spanish word for forest is "monte," the same as mountain, while the Italian word "forestiere" means a stranger or a man from a land of woods. The French and Italian words for woods are "bois" and "bosco," which come, no doubt, from the old Germanic word "bush." The Dutch for forest is "bosch," the same as bush, and no doubt the term "sugar-bush" for a forest of sugar maple trees is a relic of the early Dutch in America.

The red cedar, the most widely distributed tree of North America, is disseminated by birds—especially robins—which are passionately fond of its aromatic berries. The seed, which is hard, passes through their bodies uninjured, and is dropped here and there over the country. This cedar is one of our hardiest forest trees, and is generally a pioneer in old fields which have been exhausted of their fertility after years of cultivation. It grows in the wet swamps of Florida, in the shifting sands of the Jersey coast, and on the rocky mountain sides of the West and North.

THE SONG OF THE SWAN.

BALDWIN SEARS.

There never was a better hearted young fellow than Laurence; no one who felt more deeply his own failings and a woman's perfection. He heartily acknowledged her as the gentlest, wisest, noblest thing ever made; meant to be a guide and strength to steady man's weak brute nature.

Perhaps he thought thus because he was in love with Amy, who was certainly a charming girl. She smiled when Laurence told her these things; she felt noble and earnest when she knew this honest boy believed in her. Her happiness was troubled only by longing for expression as she stood under the flowering trees in the garden. Under her feet the sprouting grass was thick with violets and dandelions; the air about her fluttered with white petals. Swinging invisible among the boughs a robin sang joyously, deliriously, to the sky, the sun, the glory of May, the face of the girl, that loveliest flower of all. Amy was silent, but her heart sang, too. She loved the unseen creature for its ecstasy. How wonderful it was that she and the bird should both have the same joy of life, of love.

"What is it, sweetheart?" said Laurence, tenderly. But Amy could only hold her lover closer as she wept on his shoulder.

"The bird, it is so sweet, so sad." She smiled even as she spoke at the trill of rapture from the happy creature overhead.

"Don't you think such things make us better?" she whispered shyly. "Such innocent happiness."

Her lover kissed her reverently. What a beautiful thing this tender womanhood was. He felt ashamed that he had ever cared for hunting; that he had ever felt a desire to kill birds. "Sport"—it was murder; he felt a sort of disgust at himself.

He was dismayed next morning to find Amy sobbing, heart-brokenly, at the foot of the garden tree. She could only hold out her hand in speechless grief as he begged her to say what had happened, looking inquiringly at the soft thing she held.

"The robin—" he exclaimed.

Amy nodded, with fresh tears streaming down on the gay, disordered feathers, the limp little body, with slowly closing eyes, the breast with the dark crimson drops where the cat had torn it.

"And think of those poor little young in the nest," she sobbed; "left alone to starve. Oh, it's cruel, terrible."

It was long before she could be comforted. The man tried to explain:

"But, Amy, child, it is only the law

of Nature. Birds were made to be caught—to satisfy—"

"No, no; how can you be so cruel,—so heartless?" He was silenced by her agony of grief.

During his absence from her he took it as a sign of her sweet influence and mercy that he found his hunting so much less pleasure than usual. "Even such a commonplace creature as a quail must have a family and feelings," he said to himself as a brace got up and then dropped inert and lifeless as he fired. He held the bird, staring at it thoughtfully, instead of placing it at once in his pocket. Then he laughed determinedly.

"What a freak I'm getting to be. Birds were made to be shot and men to eat them. I'm no vegetarian, and for that matter, haven't I seen Amy eat grouse and venison? There, I'll tell her that. Oh, by Jove, what a shot! Ah, my beauty, I got you that time." A hungry hunter is not given to regrets at the amount of game he brings in, unless it be small.

Laurence ate and was happy and slept the sleep of the innocent as he tramped out his 3 weeks in the wilderness. He felt a dash of the incongruous when Amy's letters came from the far-off city, telling him not to forget *Siegfried* the first week in November.

"Forget," just as if he could forget anything where Amy was.

His eager hands made bad work of his necktie, and as Amy came down to meet him the young fellow, heedless of results as to finery, gathered her in his arms and kissed her adoringly. His simple heart was wonderfully proud and content as he sat beside her in their box. It seemed only right and natural that so many glasses should be leveled toward her, even though he resented their familiarity. He was only half attentive to the music, the story. It was so long since he had seen his sweetheart, sweeter and dearer than ever. The lights, the flash and gloss and flutter of jewels, white shoulders, lovely faces, the subdued tumult of life that seemed to move with the stream of *Siegfried* music; that forlorn, mysterious sighing of tree boughs and hidden rivers through primeval forests, with the wordless speech of birds calling across the gloom. It was all part of the ineffable, tender beauty of the girl who sat beside him, her face tremulous and pale with deep feeling, her eyes shining mistily out of the shadow upon him. He reached out and took her hands, a rush of supreme affection welling up in his heart. She smiled back at him, touching his cheek with the fringes of her feather fan; he shivered slightly. There

was something eerie in the music that warned them of impending disaster, a cry of reproach and madness; he seemed to be waiting with Siegfried.

As the bird, high in the woodland trees, called out its wild note of greeting, piercing, high and clear, he felt a thrill of coming doom.

Looking at Amy for reassurance he was chilled by a mysterious change in her face. It seemed to have lost that tender girlishness which he had revered; it was hard and indifferent, and her eyes had the keen brightness of a knife; her hand in his was cold and thin. Even when the light came back and the music brightened, he could not quite shake off the fancy that had touched him, a vague distrust. He looked down over the crowded house, on the throng of women listening eagerly, indifferently, happily, wearily, to the rolling sea of music. They seemed to have suddenly become hateful to him. Their beauty had a terror. There was a quivering restlessness, a restrained eagerness, almost as of a hunter sighting his prey. The feathers and soft plumes in their hair, the birds crushed in deft mockery of life against the cold white foreheads of girls, had an ironical effect on his excited nerves; the hum of their voices in the interlude smote his ear harshly. He turned to the stage. He would not heed the absurd fancies of his excited brain; he had been in the woods too long.

As he waited the music paled like dawn before the sun, and over the gulf the voice of the magic bird caroling wildly from the heights sprang arrow-like. Not with those enchanted words of prophecy and cheer, bidding Siegfried follow and rejoice, but with a terrible wild cry of anguish and despair—a cry that shrilled, lost and forsaken, through the world.

"Ho, brothers, victims, comrades, a long last greeting I bring from all those who are about to perish. Answer now, for now may you say farewell, farewell forever, to forest and woodland, and ocean and meadow, to brothers and offspring. Cry aloud; farewell!"

At that summons, a wail of sorrow rose, mingled with the flutter and beating of wings. The air was filled with cries, laments, a tumultuous agony of grief. Every other sound was hushed. The human throng, slayers of that helpless multitude, sat as if turned to stone, while the victims, freed for one moment by the magic bird, called to each other, to those who must soon join them, a sorrowful farewell.

"Woe, woe, the day! Nevermore by the lake, by the mountain, on the marsh, in the wild wood shall we see our brothers. Never again shall we fly with them free through the free air." The cry of the wood pigeon ended in a low sob.

"I have no brothers; they were all slain before me. I was the last; skinned alive!"

"And I," echoed the voice of the heron; "I was snatched from the nest, from my young, though I struggled and begged frantically for their sakes. My crest, that now adorns the young girl's head, was torn from me, and my bleeding body was flung where those innocent, starving nestlings saw my death!"

"And I, and I," cried the gull and the tern; "though flayed alive, my sufferings were nothing to the agony of knowing that my young died of starvation."

"And I was trapped with a thousand others in a garden in the South. It is silent now where we used to sing."

"Alas, alas, the world is sad without us!" cried a bluebird from the hat where he was poised in bitter mockery of his joyous flight. "Lovers stand no more in the lane, hand in hand, looking into each other's eyes with pensive joy when they heard my evening carol."

"And I, too," sobbed the thrush. "There is no one to tell the violets when the sun has set over the woodland. Ah, I am homesick for the forest here in the city streets, and soon I shall be flung aside to make way for another victim!"

"Oh, for a breath of the wild, salt sea," screamed the fishhawk. "Nevermore to feel the spray on my glad wings as I dive through the waves!"

"Nevermore; nevermore; nevermore!" echoed the swallow, and the grebe, and the bobolink—a thousand voices as wings and breast beat helplessly. "Nevermore, nevermore shall we see the lands we loved and glorified with our beauty and guarded from harm. Victims of vanity, we are doomed! doomed! doomed!"

With the heart-breaking anguish of these cries ringing in his ears Amy's lover turned to her for reassurance. But his hands fell at his sides. The smile on her lips had broadened to the grin of a savage. Her soft hands looked like the claws of some cruel harpy as they picked indifferently at her marabout fan. Had she ever wept at the death of a robin? With a groan of pained and helpless confusion Laurence dashed her hands from him and rushed from the house. Anywhere, to escape the remembrance of that terrible scene. But the shop windows, the streets, the cars, the carriages, were fluttering and echoing with the same cries everywhere. He was surrounded by this slaughter of innocents.

In a sort of panic he rushed home, put some clothing into a bag, changed his clothes. Then looking around the room with questioning eyes, as if he sought the reason of his madness, his gaze fell on Amy's picture where it hung beside his bed. As he laid it in fragments on the table he saw himself in the glass and

stared, wondering at the strange face. What had made him like this? That morning he had been happy. He sat down and began to write, feverishly, shakingly, as if he feared he might never finish.

"Amy—I must go. I can't marry you. You aren't what I thought. You've deceived me. You aren't innocent and good and tender-hearted. You're cruel and vain and lustful. God forgive me! God forgive us if we have made you what you are, if it's to please us that you have made such savages of yourselves. When I saw those wings in your hair—no, I can't go on. God and man have to forgive you for what you have done. Men aren't good, but they aren't cruel—wantonly, vainly cruel. Better, a thousand times, that you should sell yourself, yes, your soul, too, than murder the tenderness of a thousand innocent children by your fearful example. Forgive me for saying I don't love you. How can I? Oh, Amy!"

Into the envelope with this he put the torn picture.

It was early morning when he came through the wood and reached the edge of

the sea. The tide was beginning to whisper as it started in. Over the salt marshes a flock of silver-winged gulls circled. At the report of a gun one fell. The others in wild flight sought escape, but an unerring aim brought down another.

"You shall not live to be tortured. I will save you from that; I will be merciful," whispered Laurence, brokenly, as he ran across the spongy green turf to the gulls. He whispered again, softly and pityingly, to the dead birds as he smoothed their outstretched wings. "They shall not have you; they shall not find you; I will hide you safe."

He began to gather the grass and spread it over them, when a glimpse of white breast glimmered through. In a sudden frenzy he stamped on the spot, crushing down into the ooze and mud the last vestige of white. As he stood up, breathing hard, his hands shaking, his eyes roving, a long line of gulls swung past through the morning air. He raised his gun; then with a sad, moaning cry he turned the weapon toward his head and with a stick pressed the trigger.

BOULIMISTS.

JAS. WEIR, JR., M. D.

A boulimist is an individual "who bolts his food, an abnormally enormous quantity, in an animal-like manner." *Boulimia*, or *boulimy* as the English authors write it, is the rule and not the exception among savages or primitive peoples; hence, when observed in a civilized human being, when it is not a symptom of disease, must be attributed to atavism or reversion.

Many instances of *boulimy* are related by travelers, especially by those discoverers who have made the northern portions of the globe the field for their labors. Belcher declares that the food of the Innuits averages 24 pounds a day, mostly of fats and oils, for every individual, and Captain Lyons gives the following graphic account of one of these people at table:

"Kuillitleuk had already eaten until he was half-seas over. He was dropping asleep, with a red and burning face and open mouth. His wife was stuffing bits of half-boiled meat down his throat with the help of her first fingers, steering clear of his lips. She carefully watched the process of deglutition, and immediately filled up any void that might appear in the orifice with a stopper of raw fat. The happy man did not stir; he moved nothing but his molars, chewing slowly and not even opening his eyes. From time to time a stifled sound escaped him, a grunt of satisfaction."

An Innuite, when he cannot get blubber

or oil, will sit down to a cauldron of boiled sea-weed, holding 2 gallons, and will not arise therefrom until he has devoured every shred in the pot!

I have frequently seen negro farm hands who would eat 6 or 8 pounds of solid food at a single meal, washing it down with several pints of sweet milk or buttermilk. The Indian is likewise a great eater and thinks nothing of disposing of a deer's hindquarters at one sitting!

Some authors have endeavored to differentiate between *gluttony* and *boulimy*, but have, in my opinion, failed most signally. *Boulimia* and *gluttony*, as far as the normal civilized human being is concerned, are identical. The glutton, like the boulimist, eats inordinately; he bolts his food in an animal-like manner; he makes disagreeable and brute-like noises when eating. With the glutton "eating, as well as reading, maketh a full man," to paraphrase Guillemond, "and repletion and content are synonymous terms in his language. 'Estando contento no tiene mas que desear,' says Sancho Panza, and the fact is accordingly announced with the accompaniment of various natural phenomena to which it is unnecessary to allude, and which are, to say the least, somewhat subversive of civilized and refined decorum."

On one occasion I saw a young white man, an American, eat a peck of soft peaches and 3 pounds of grapes at one sitting. This

same youth thinks nothing of eating for supper 4 or 5 dozen fried oysters, followed by 2 dozen raw. To win a bet, he once ate the enormous number of 9 dozen large fried oysters. He has had numerous attacks of intestinal trouble, during several of which his physicians expected him to die; yet he still lives, and is ready at any time to gorge himself to repletion if some one will only furnish the food!

Charles Domery, a French prisoner in England in 1799, was a boulimist of boulimists. One day he was permitted to eat as much as he desired, and between 4 o'clock in the morning and 9 at night he devoured 4 pounds of raw cow's udder, 10 pounds of raw beef, 5 pounds of candles, and 5 quarts of porter! This man was accustomed to supplement the usual prison ration with raw cats, dogs and rats which he caught, killed and ate like one of the carnivora. On one occasion, while in action on board of a man-o'-war, feeling hungry, he picked up the leg of a man, which had been amputated by a cannon ball, and was eagerly consuming it when commanded to desist by an officer!

Not long since an English surgeon held an inquest on the body of William Ward, a pensioner, 84 years old, who died from suffocation. "At the post-mortem examination 3 pieces of meat, measuring in all 12 inches in length, were found in the dead man's throat. Evidence was given that the deceased was always a gluttonous feeder and in the habit of bolting his food. His daughter-in-law said she used to mince his food, but that even then he would bolt such large spoonfuls that he had to gasp for breath."

The female boulimist is truly a *rara avis*, and I have seen only one in all my experience. This young girl was brought to my office by her mother, who thought her daughter was the victim of disease; probably of *tænia*. The girl was handsome in a large and Junoesque way. She had a magnificent form, looking more like a full-grown woman than a girl of only 16. Her color was good and she presented an altogether wholesome appearance.

On being questioned she said she had eaten at breakfast (7 o'clock) "a porter-house steak, two slices of breakfast bacon, a spoonful of hashed mutton, four hard-boiled eggs, potatoes (Saratoga chips), 8 or 10 biscuits (beaten), 10 buckwheat cakes with maple syrup, 2 cups of coffee, and a pint of sweet milk."

She visited me at 10 A. M., and had eaten, between her 7 o'clock breakfast and 10 o'clock, a pound of chocolate creams! Hanging in the room was a bunch of large bananas, sent me from New Orleans. I saw the girl glance at them several times and invited her to help herself. She needed no second invitation, but immediately proceeded to gorge herself. She ate 7 bananas

and declared she could eat 7 more, but would leave the rest for politeness' sake.

Careful and repeated examinations of this girl showed nothing abnormal save her wonderful appetite. She was a boulimist,

Almost every community has its boulimist, who, strange to say, is usually proud of his gastronomic powers, and is always willing to accept the challenge of a rival boulimist to an eating contest. We hear daily of pie-eating contests, oyster-eating contests, cake-eating contests, chiderlin-eating contests (this last mentioned always occurs between negroes), dumpling-eating contests, etc. The contestants are almost invariably boulimists, though their boulimy is usually confined to some particular food or dish. Just as there are monophagous boulimists, there are also polyphagous boulimists, who eat anything and everything.

The clay-eaters of the Southern States (usually negroes, but sometimes whites) are monophagous boulimists. These individuals eat enormous quantities of a certain kind of clay, seemingly with the utmost relish and enjoyment. They begin the practice early in life, gradually increasing the amount of clay taken into the stomach as they grow older, until the quantity swallowed daily is simply astounding. This clay diet is very deleterious, and sooner or later kills the person who follows it.

The polyphagous boulimist, on the contrary, does not confine himself or herself to one article of diet, but devours numerous kinds of indigestible things. Most frequently, polyphagism is itself an evidence of disease; but it sometimes happens that search we never so carefully, we can find no abnormality whatever save the perverted appetite.

Not long since I saw a distinguished teacher of Latin and Greek who stayed his hunger with bits of coal, lumps of chalk, or of clay. He would also eat leaves, grass, weeds and small pieces of cedar wood. During 24 hours this man would eat 8 or 10 pounds of these things, seemingly without hurt. There were no symptoms of disease in his case.

The London Lancet, of May 5, 1894, gives an account of a polyphagous boulimist who died in the London Hospital. In this man's stomach there was a heterogeneous mass of materials, such as pieces of leather (evidently portions of boots and shoes), bits of cork, hair, bone, raw meat, clay, etc. He had given no evidence of disease before his final seizure—pneumonia.

Young girls and boys and hysterical men and women frequently eat indigestible substances such as chalk, slate pencils, etc. These people are sick, however, and should not be confounded with the polyphagous boulimist who presents no signs of ill health.

Boulimia is by no means confined to solid foods. Indeed, the liquid boulimist,

or the boulimist who shows himself possessed of an abnormal appetite for certain liquids, is more frequently in evidence than the individual whose boulimy is confined to solids. Moreover, this intemperance is not the result of the cumulative appetite of the alcoholic drunkard, for many of the favored liquids contain no alcohol. Thus, one of the most pronounced boulimists of my acquaintance is a buttermilk drunkard. I have seen this man, time and again, drink a gallon of buttermilk at a sitting. Another of my acquaintances is a coca-kola boulimist. He literally spends his days running from one drug store to another in pursuit of his favorite beverage. Another is a cream and soda fiend, and drinks several gallons of this mixture during the day.

The champion beer drinkers are generally found among the employes of breweries, and the quantity of beer guzzled by some of these men is simply phenomenal. I know a beer-wagon driver in Louisville, Ky., whose usual allowance of beer is between 5 and 6 gallons a day! This man, however, eats very little solid food. A cracker or 2, or a few pretzels are enough for him.

In olden times people ate more than they do now, and the boulimist was considered a mighty man in more senses than one. Indeed, many an historical character has come down to us with boulimy "writ so large that he who runs may read." Benjamin must have been a boulimist, for we are told his mess was 5 times as great as any of the others (Genesis xliii). Benjamin's gastronomic feats are commemorated to this day in Oxford, at one of the colleges.

"On Mid-Lent Sunday the first lesson in

the evening is Genesis xliii, which gives an account of Benjamin's mess, which was 5 times as great as that of any of the others. Furmenty is always served in Hall on this evening, and the junior mace at each table is considered as Benjamin and served with an enormous helping. If he eats it all he can 'scouce' (fine the whole table in sherry); if he cannot he himself is fined."

Alexander of Macedon was a boulimist, and it was after one of his gluttonous feats, during which he 10 times emptied the goblet of Hercules, that he died. Tiberius, Nero and Septimius Severes were also marked boulimists, as were Cato (*Narratus et prisci Catonis saepe calicisse mero virtus*), Seneca, Alcibiades and many other noted Greeks and Romans. Royalty itself has often wielded a sceptre-trencher. Henry VIII. of England and Catherine the Great of Russia were great eaters and drinkers, as were Peter the Great and his daughter, Elizabeth, while the gluttonous and lecherous orgies of William Rufus were an open scandal and are now a mere matter of history.

The digestive organs of the true boulimist seem fully capable of taking care of the enormous quantities of food injected. Even the polyphagous boulimist has seldom any fear of that *bete noir* of civilization—dyspepsia. In the true polyphagous glutton (one whose polyphagism is not incident to disease) the intestinal viscera become wonderfully tolerant and the boulimist often lives until carried off by some intercurrent malady. Frequently, however, the abnormal and perverted appetite occasions death by closure of the lumen of the bowel through infraction, intersusception, or invagination with resultant peritonitis.

WITH SLAVES AFTER SHEEP AND CARIBOU.

A. J. STONE.

One of my most interesting hunting trips was to the headwaters of the Carcajou, the Plume range, the Tali-niline, Montagne Rocheuses, the Sa-younne Kfme, and the Cercle Polaire.

Let not the reader retch at these names. I have copied them carefully from a chart prepared by a priest, who had come to this country as a missionary, but concluded to devote his energies to a more hopeful task—that of getting out a chart covered with unpronounceable names, a compound of French and Slavé.

How delightful to be clear of the muskeg and an atmosphere where every breath swarmed with living demons armed to do unspeakable torture.

A long day of cloudless beauty lacked an hour of its close, and a cool breeze from the deep canyon of the Carcajou fanned gratefully my poisoned flesh. Our dreaded

foes had sought cover. Our camp was pitched on a barren reef of sand; at our feet rolled the torrent of the Carcajou, which we had just waded; above us towered the rugged mountains, through whose rocky barrier the river had worn a passage between perpendicular walls of wonderful height.

It was a sublime scene, needing only the visible presence of some of the noble animals, whose home is among these wilds, to make the picture complete. While I stood gazing enraptured about me, wrapped in silent admiration, a small, white speck in the distance seemed to move, and presently another. Roused instantly from my reverie, I adjusted my glasses and leveled them on the moving objects. Three white sheep! My ideal picture was a living reality.

Calling my 2 *Slavés* from the fire, where they sat intently watching Johnnie frying bacon and making bannocks, I pointed out my find. For a moment they looked stolidly, then turned back to the fire and the cooking. Oh, 'or one moment of the companionship of white men! Oh, for a moment of Thompson! Even though he does not like mountains, he would like this.

But twilight had come and my picture blurred, and presently I, too, turned from my worship to the fire, to bacon, bannocks and tea; to wonder why Providence had created this brutish race, who know but two things well, to eat and to fast. I wanted to hit one of them a crack just to see how much alive he was, but forbore.

Next day we penetrated the mountains, and late in the afternoon came to a wide canyon well into the range, where, in a grove of stunted pines, we pitched our canvas, resolved to try our luck at hunting. I had a fancy that I knew enough of the habits of the white sheep to be sure where and when to find them, but I found there was something yet to learn. In summer the Arctic days are so long the sheep forget about going to bed or getting up. They are, consequently, irregular in their hours. They, also, frequently run down hill when startled and are much more likely to scatter when a shot is fired into a bunch than the same animals farther South.

The day was well spent and I was about to give up and go back discouraged to camp, when one of my Indians proposed that he explore the canyon wall a little farther. He had gone less than 100 yards when he stopped and beckoned me to follow. Below him several hundred feet, on a ledge seemingly only a foot wide, lay 3 young rams. Below them again the wall, like that above, fell off vertically for hundreds of feet. How they had got there I could not see from my position. I could not shoot them where they were. The awful precipice made me dizzy, and, besides, to shoot them there would be to lose them. Believing they would come to the top at a point some distance to the left, I directed the Indian to wait till I had gone back to a point where I could command the path. I thought they would use, and then to startle them. He did as I ordered, and I waited patiently for their advent, but nothing came. I grew restless and hurried back to the edge of the cliff. From that point I could see them walking deliberately in a direction opposite to the one I had mapped out for them. Doffing hat and coat I ran along the top of that dizzy cliff, hoping to overtake them.

Suddenly from out that yawning chasm 2 of them flashed upon the top of the wall.

I had no cover and they instantly discovered me and fled. I fired twice but could see no effect. I followed, looking for blood sign and wondering what had become of the third sheep, when as if to answer my question he suddenly appeared at 200 yards. I fired but missed. He ran along the wall away from me and then turned to take a look at me. Again I fired. He fell toward me and bounded over the cliff. When I reached the point where he fell he lay mangled 300 feet below and beyond reach.

While in camp one of the Indians had pointed to a high mountain near us, saying on it the sheep had a "nest." I determined, therefore, to scale that mountain and spy out the nest. The climb was long and hard, but we reached the top at last. As we approached the sacred ground 3 rams came down and seeing us made off. Such ill luck! Had we been 10 minutes earlier or had we had a screen we should have got them, but they were too far for a shot.

Donald, one of the Indians, started in pursuit, armed with his long-barreled muzzle-loading double shot gun, and for the sake of seeing how he managed running and loading I followed.

Firing both barrels unsuccessfully soon after he started, he at once proceeded to reload. Carrying the gun in his left hand, muzzle up, he manipulated the powder with his right, catching the powder horn in such a way that the powder ran into his hand, and from his hand into the barrels. Then putting the muzzle to his mouth he dropped the 2 spherical balls into the gun without patching or wad, giving the gun a smart blow to settle the balls, then the caps, and the loading was done.

As the 3 sheep ran I turned one a very pretty somersault, and as they scurried down the mountain Donald emptied both barrels uselessly, at such an angle I am confident the balls rolled out before the triggers were pulled.

After supper I strolled up a long ridge and bagged a magnificent 4-year-old ram with a fine head.

Next morning, while I was trying to get a picture of the canyon, I was surprised by a big ram, my head under the focusing cloth. Withdrawing, I saw him, but he fled before I could catch him. However, he ran toward the men who were skinning my last night's victim. I yelled, the men saw him and killed him. I howled and laughed over our luck till the stolid Indians must have thought I was worshipping some white man's deity in gratitude for our good fortune.

Several successes marked the remainder of our hunt, notably 2 magnificent specimens which I killed the last day. My hunt for caribou, however, was a complete failure.

TWO TROUT STORIES.

C. E. HANSEN.

In Western Connecticut, in the Housatonic valley, at the foot of the Berkshire hills, flows Half Mile river, one of the best trout streams in New England. It is never dry, and in its many deep pools the trout find secure refuge. One day in May a friend and I started early for the brook, to have a day's fishing. The winds were cold and chilling, but the sun was warm and we were happy. The brook sang varying melodies; here a murmurous *andante*, as it flowed into a wide pool, there a thunderous *forte*, as it drove over a precipitous rock. The birds had not arrived, and we missed their notes of gladness, but a pair of woodcock, flushed in the brush, gave us for a moment their joyous companionship.

As the water was high we had to forego the fanciful fly and resort to the lowly angle worm. Soon a fat, juicy wriggler dangled on the Aberdeen, and I dropped it into the current just above the pool and awaited results.

In a moment there was a tug on the line. A quick strike, a bending of the supple rod, and a $\frac{1}{2}$ pound trout darted back and forth through the pool. Winding the line rapidly on the reel, and elevating the rod, I held in my hand our first trout. A moment later my companion had its mate and we separated. I devoted all my attention to the pools where the big fish are supposed to lurk. In a brief time I had several good bites, but through bad management or ill luck, lost some big fellows.

I had come to a long rapid, midway of which was one lone stone, standing dry, on which I could stand, though rather uncomfortably. This I did not notice so much as a likely pool 25 feet below. Trees and bushes were all about me, and it required my utmost skill to keep my line from entangling while casting. Beneath me surged 3 feet of dark, cold water that I shrank from stepping into. I poised on one foot, and by careful management at last succeeded in dropping the bait plump into the swirl of the eddy on the edge of the pool. An instant response came and I began to reel in. The stream was wide and the trout had plenty of room. As I drew him nearer he espied the cause of all his trouble and fought harder than ever.

"My fish," thought I, but when I reached for him he freed himself by a desperate effort and flopped into the water, back to his freedom. I longed for my waders. They were 20 miles away. Discouraged by my ill luck, I kept moving until I overtook my companion. Then we had lunch, after which I took a nap on the sunny side of a cordwood pile and dreamed of fish for an hour.

Awaking, I brushed the cobwebs from my eyes and started up stream. I had 4

trout, all good ones, and my companion had twice as many. Coming to a pool not far from my resting place, I cast. The pool had been divided into 2 parts by a heap of brush thrown in by wood choppers. This brush was high and reached across the brook and around the sides of the pool. To the left was a large tree which had blown down and lay half submerged in the left division of the pool. Running under the tree and close to the bank the current carried my bait into the very dooryard of a large trout. He took the bait eagerly, and when I struck, he assured me he was over a pound in weight. I remember well his manoeuvres. He surged from side to side, now on top of the water, and, like a flash, under again. I felt encouraged, but doubtful of landing him in that place. Determined not to lose him I jumped into the brush near the water's edge, holding my rod high. Both feet went through, and ugh! I was knee deep in ice-cold water.

The trout, meanwhile, had gained the brush, the double snell was sawed in two and he was free! Adjectives were useless, so I tied on a new hook, baited it and got myself free from the unpleasant situation.

As I reached the top of the bank I turned to take one last, mournful look at the scene of my recent experience, when, to my surprise, I saw my late captive leap out of the water, rush through the rapids again, and, after another leap, roll belly upward, evidently hurt. Dropping my pole, with a wild hurrah, I rushed down that slippery tree trunk at imminent risk to leg and neck. Splash! I was into the pool up to my waist. A hurried glance discovered the trout with the hook and snell dangling from his jaw. Reaching down in the deep water to my armpits I sought to grasp him, but he was muscular and slipped away, swimming under the brush and into the pool on the other side. Nothing daunted I followed him about that pool for several minutes, getting into deeper water at every step. Watching my opportunity, when he had just finished one of his desperate rushes, I reached down, the waters surging over my shoulders, and he was mine!

I lifted him from the water and viewed him at arm's length. He was a beauty. I stood in that icy torrent for several minutes, regardless of everything else but my capture. Then wading ashore I put him into my basket, leaving his tail sticking out over the edge. When I appeared before my companion he naturally wanted to know why and how I took such a bath at that time of year. My answer was to point to the tail sticking out of the basket.

"Ah! I see," was his comment.

A CONTINUOUS PERFORMANCE.

HERB.

One day in early fall, a few years ago, I had to attend the county court, which was held about 12 miles from my home. Leaving the house about 7 o'clock, I met a few gentlemen who were bound for the court house also. Seven of my hounds had followed me, though I had no idea of a hunt; but when about half way to our destination, Black, who had a very cold nose, made a dash of 100 yards or so up the road and opened. The other dogs rushed after him, but could not get scent. For the next mile or so they repeated this performance several times. We supposed some one had gone on before us with a cur, and it was he they smelt, but on reaching an old path that turned down into the woods, Colonel, who was a short distance ahead of the other dogs, threw up his head and dashed down the path, opening at every jump. As the last dog disappeared in the brush, out jumped a red fox, about 200 yards farther up the road. We stood still until the pack came out into the road and then started on. The fox kept to the road for nearly a mile, and then turned toward the river, but on reaching the low grounds saw he could not make it, so kept to the bluffs. He was running parallel to the road on which we were riding, and we could see him as he crossed the little clearings between the hills. As he went into the bushes on one side of them, Colonel came out on the other. The other dogs were quite a distance behind. At the turn of the road about 2 miles from the court house, the fox came into the road, and Colonel, who was then within 50 yards of him, caught him before he had gone 50 yards more.

The rest of the pack were then nearly half a mile behind and had "bothered;" but while I was tailing the fox they broke out afresh. Colonel was still mouthing the fox when I heard Uncle Billy, one of the gentlemen who was coming up, shout:

"Look behind you!"

I turned and saw a large gray fox standing within 15 feet of me. His head was turned away, and he was listening to the pack. Colonel saw him at the same moment I did, and made a spring for him, but I threw myself on him as he jumped past me, and we had a rough and tumble all over the road. I managed to hold him until the other dogs came up, which gave the fox about 3 minutes' advantage. I suppose he had been started up by the noise but had crept off in the wrong direction. The pack dashed up the road to the court house. As we came in sight we saw a large crowd of men running about for their horses, while others followed the pack on foot. Old Judge B. was standing on the steps and shouting as loud as he could:

"Sing to him, puppies, sing to him!"

The fox had run straight through the court house yard, crossed the road and was going through a large field, making for a piece of timber a mile away. I made a cut down through the field, but found my way barred by a barbed wire fence, when nearly up to the crowd. I dismounted, put my saddle blanket on the top wire, and over that my horse took the fence. The dogs were almost on the fox as he entered the pines, and as I reached the edge, I heard him squeal as they tore him.

Taking him up I walked out to the crowd who had followed and we started back to the court house. When about half way through the field one of the crowd shouted,

"Listen!"

We all stopped and as we listened we heard that call so dear to the hunter's heart, "Hark, hark! Hark! Hark! Hark, here!" floating down through the pines. What could it mean, was asked. I hushed the dogs to the man who was calling, and we rode back to the pines. Going a short distance in among them, we heard some one calling,

"Star, dogs, star!"

A moment later Rattler opened and they were off on a hot scent. We rode up to a small clearing, where we found a man who said he had seen a gray fox cross the clearing just as the pack had stopped tonguing down in the pines, and he supposed they had lost the quarry. As we stood there the fox came back and for about an hour kept doubling around the field, making a fine run. At last, as I was standing in a path, I saw the fox dash across it with the whole pack within 30 yards of him, and a moment later I heard them treeing. I rode over and found he had run up a leaning oak and there he sat in the first crotch, smiling down on the pack, some of which were trying to climb the tree and the others to gnaw it down.

In a few minutes it seemed to me every man in the county was at that tree. I do not think there was a man remaining at the court house. After awhile we decided to take the dogs off, make the fox jump out, and give him a start of $\frac{1}{2}$ hour before putting the dogs on his trail. As they would come quickly at my call I was to remain and drive the fox out, so, taking the dogs, the crowd went off a quarter of a mile. After they had gone I climbed the tree and when within 5 feet of him the gray lit out. As he hit the ground I heard Forest's voice and out of the bushes he jumped. He had broken away from the man who held him and had sneaked back just in time to catch the fox before he had gone 100 steps. That ended the hunt, so we returned to the court house where the scepter of justice resumed its sway. It had taken just 4 hours to catch the 3 foxes.

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Hayner's pure double copper distilled Rye Whiskey has been sold to consumers direct from our own distillery, known as "Hayner's Registered Distillery No. 2, Tenth District." No other distillers sell to consumers direct. Those who offer to sell you whiskey in this way are speculators who buy to sell again, by which plan they are compelled to add a profit which you can save by buying from us direct.

We will send four full quarts of Hayner's Seven-Year-Old Double Copper Distilled Rye Whiskey for \$3.20, express prepaid. We ship on approval in plain, sealed boxes, with no marks to indicate contents. When you receive it and test it, if it is not satisfactory return it at our expense and we will return your \$3.20.

Such whiskey as we offer you for \$3.20 cannot be purchased elsewhere for less than \$5.00, and the low price at which we offer it saves you the addition of middlemen's profits, besides you are guaranteed the certainty of pure whiskey absolutely free from adulteration.

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HAVE CALLED ME
WITH HAYNER'S IN
THE HOUSE."

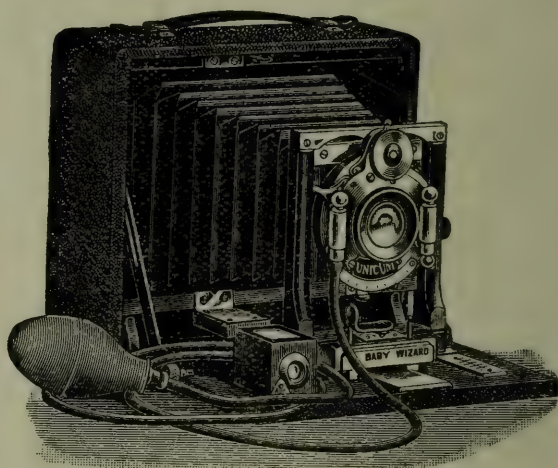
The Vital Points

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Durability
Lightness

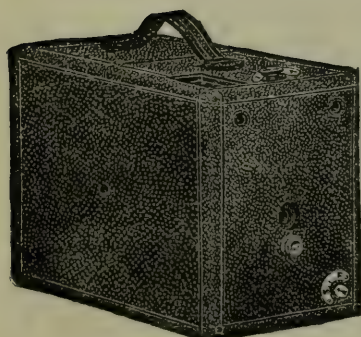
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AMATEUR PHOTOGRAPHY.

"A Bird on the plate is worth 2 in the bag."

WAYS OF THE PHOTO SUPPLY DEALER.

When I caught the "button-pressing" fever I went through all its various stages, but fortunately in the incubational period of the disease I bought the good will of a stranded photographer, and so doing saved myself much time, annoyance and money.

Among other valuable pointers he told me that all "Stock houses were robbers." At first I thought his judgment must be biased by his chronic impecuniosity, but later I found he was not far wrong.

After a month's study of hypo, pyro and all the rest, I sallied forth to buy a new lot of material. My list included nearly everything used in a studio, and I expected to get my goods for cash at the lowest market prices.

Mr. Dealer named a net price on the lot which astonished me. I protested that my instructor told me I would get 25 per cent. discount on this, 10 on that, etc.

Mr. Dealer replied: "We do not give any discount. Photo goods are sold on a close margin."

He also strongly advised me to use hypo at 35 cents a pound, as the common kind was almost useless. Finding it was impossible to do business with him I went to a photographer whom I knew and asked him to send to Mr. Dealer for the goods. My friend did so, giving me the benefit of his 25 per cent. trade discount. Beside that he sold me hypo at 2½ cents a pound, and in that and other ways effected a saving for me of just 100 per cent. on the dealer's price. As this was my first experience it made a vivid impression on my mind, and I vowed that when I "settled down" I would go into the photo supply business and grow rich.

One noticeable feature of the business is that there is seldom more than one house in any of the smaller cities. Should there be a rival house there is no competition; both combine to boost prices.

In a Western city I ran out of material, and on inquiring found there was but one dealer, as usual. On one article which I needed I had been in the habit of getting 40 per cent. discount, and I asked the dealer if he would give the same.

The look of surprise which that man's face assumed would make a fortune for any actor. When he recovered his breath he assured me on his "honor" that I was mistaken, and that he only got 10 per cent. himself, which was more than eaten up by freight, breakage, etc. I told him he did not know how to buy goods and gave him an address where he could get them at 40, 20, 10 and 5 per cent. discount. Then he awakened and gave me 25 per cent. off.

During 10 years of almost constant travel I have yet to find any line of business conducted with as little regard to pleasing the public as in the average photo-supply house. It is not as safe to take the advice or judgment of the clerk in charge as it is to trust the fit of a coat to the "Sheeny" misfit tailor.

A boy friend went to one of the best houses in his State to buy an outfit. They sold him a 5x8 basswood box, with cheap lens, chemicals, trays and frames, and some 8x10 plates which were made in 1887! Finding the boy had some money left the clerk sold the poor innocent an old single 11x14 view lens, with 16-inch focus, to use on his 5x8 box, which only had a 14-inch draw. Instead of selling him a modern outfit, which would have made him a permanent customer, they shoved a lot of old junk on him, with the result that he soon became disgusted with the whole outfit and gave it away.

I do not suppose this little kick will revolutionize the photograph supply business, but it may induce some novices in our art to learn, before they buy goods, just what they want and what they should pay for it. C. A. D., Fenton, Mich.

HOW TO BEGIN.

As I have gone through the photographic mill and, I hope, picked up a little knowledge, my advice may be of use to those about to enter the hopper. First of all, get an outfit suitable for making time exposures, and determine not to take one snapshot until you can do decent work. To be a successful snap shooter you require the same qualifications as for quick wing shooting. The eye and the trigger must act in unison, else the bird—or the picture—will be missed. One cannot learn in a day to cut down birds passing at high speed and at all kinds of angles; yet a novice will go shooting with a camera and wonder why there is nothing on the plate. Centering an object on the plate is exactly the same process as centering your load on the flying bird, and to my mind just as difficult.

Buy your outfit now and practice with it through the winter and spring. Then when holiday time comes around once more you will feel confidence in your ability to bring home good pictures.

I do not name any make of camera; there are many good ones on the market. I would advise a 4x5 of 15-inch focus. If the camera is a rigid one—and don't take anything else—it will cost a fair price. If you don't wish to spend so much, get one of 8 or 10-inch focus. Have at least 3 double holders, so you can carry 6 plates. Don't touch films until you can use glass.

The lens should be single, and of about

6-inch focus. This will not cost more than a cheap rectilinear, and, except for strictly architectural and high-speed work, will prove much more satisfactory.

Use slow plates. Carbutt's B 16 are exceedingly good. No doubt there are other slow plates equally as good, but these and my single Dallmeyer are what I use when I want extra fine work. Use the developer recommended by the maker of the plates. It may be advisable to add 1-3 more water and let the plate develop more slowly. This is a thing you must not hurry. Over-exposure and over-development are not so common as the other extreme. Do not take portraits on any consideration whatever! If you stick to this you will save yourself from much vituperation and many an uneasy hour. Practice on the garden gate, a leafless tree, plants or anything your friends won't want copies of. Practice focusing first; see that your camera is level; make a rule of having the base of your plate level no matter what you are taking. You can buy a small spirit level for 10 cents at any hardware store, so you have no excuse for crooked pictures. A little help from a friend who does time work will assist you in getting a correct idea of exposure. Try making 3 exposures in quick succession on one object; make the first of what you consider the correct duration, the next 50 per cent. longer, and the last 50 per cent. less. For instance, if No. 1 is exposed 1 second, give No. 2 $1\frac{1}{2}$ seconds, and No. 3 $\frac{1}{2}$ second. Mark each, develop side by side in the same dish, and see which is best.

Do this a few times and you will, if you use your brains, learn a good deal. Keep some of your failures and the notes belonging to them. Keep a record of every exposure made and its result also. Stick to one make of plates and of paper and do as the makers advise you.

H. H. Williams, Charlottesville, Va.

HOT WEATHER HINTS.

Many enthusiastic amateurs dread the hot, sultry weather of our summer months, knowing it means for them frilled plates, choked-up negatives from the too warm solution, fog and pitted films—the result of slow drying in warm weather. With the following precautionary measures I now have little trouble, although the mercury in my dark room often registers 85 degrees.

Always do developing in the morning, as that is the coolest part of the day. Bring in a bucket of cold water, and on this float your developing tray and the graduate, which is to contain the developer. Leave them on the water until the last minute. Set your bottle of developer in a mug. Pour cool water around the bottle until mug is full, and leave a few

minutes. Change several times, and your developer, also, will be cool. Everything is now ready but the hypo. In hot weather use this only when freshly dissolved. It is much better to dissolve it in the tray in which you want to use it, as the process cools the tray. For a 4x5 plate measure into the tray $\frac{1}{2}$ oz. hypo and add 2 oz. of cool water. Let dissolve and place on a convenient shelf in dark room. When ready to develop, lift graduate out of the water, where it has been cooling, pour into it the usual quantity of developer, and take out developing tray, seeing that there is no water inside, as a little water on a plate previous to developing will cause ugly spots.

Nothing now remains but to light your lamp and proceed with your work, which should not occupy over 15 minutes under normal conditions. Dark rooms are close and disagreeable in warm weather, and one is generally in a hurry to get out into the open air. So after plate is put into the hypo, cover the tray and set it in a dark corner. You can now open the door, put out your ruby lamp, and begin cleaning up. Fix for 10 or 15 minutes, rocking tray now and then. Washing, in hot weather, should not last over 20 minutes. Use plenty of cool water and change every 3 minutes, if running water is not at hand. Do not handle negative any more than necessary until dry, as the heat from the hand is likely to injure film around edges.

Have you been troubled with a deposit settling all over the face of your plate while washing it face up? Get a dish just large enough to support the negative by its corners. A small breakfast plate is about the proper size for a 4x5. Place negative in dish face down, allowing the water to run freely over and under same. An almost speckless negative will be the result.

Rapid drying in hot weather is important. If a good current of air, free from dust, cannot be had, soak your negative in alcohol a few minutes, and stand away to dry.

E. L. Dupuy, Blackstone, Va.

SPOTTING OUT NEGATIVES.

In reply to Ferdinand, Port Jervis, N. Y.: Spotting out means retouching a negative or a print by means of a small brush charged with pigment. A negative to be spotted out is set on a retouching easel, which is simply a thin board inclined at an angle of about 45 degrees and having a hole in it through which light may be reflected from a sheet of white cardboard. A hood to prevent other light reaching the eye is mounted on the board. The operator sits facing a window, and the negative being placed over the hole is

thus seen brightly illuminated. The brush is known to the trade as a spotting out brush, or artist's pencil. It may be bought at any artists' supply store for a few cents. It is one of the smallest brushes made. The hairs should be about $\frac{1}{4}$ inch long, elastic though not very stiff, and the brush when wet should have a fine point. The pigment is the ordinary china or India ink sold in stick form. A 5-cent stick is sufficient for a lifetime.

Place the negative on the easel and with the brush lightly charged apply ink to any spots of clear glass you wish to fill. The brush, which is charged by dipping it in water and drawing it over the stick of ink, must be applied to the glass in a series of delicate touches. Stroking the glass is not the way to handle the brush; light stippling is what is required. Care must be taken not to have too much water on the brush, as the result will be destructive to the work already done, and will make the ink flow to the edges of the spot. It is better to work slowly and to go over the same places several times than to hurry. If there be too much ink on any part it may be removed by lightly picking it off with a sharp pointed instrument, like a bradawl.

The entire operation is one requiring great care and delicacy of touch, and good work is seldom done without long experience. Spotting out pinholes is easy, but when it is an extensive scratch that is to be treated, it is another matter.

Spotting out prints is simply applying to the paper a suitable pigment which will blend with the color of the print. On solio and similar papers Venetian red is sometimes used. On black and white pictures the India ink is the best medium.

While it is better to have all changes made on the negative, it is sometimes impossible to secure the desired result without a combination of the 2 methods—doing the principal work on the negative and finishing by slightly touching up the print.

Jas. W. Manson, Troy, N. Y.

SAVING THE CLOUDS.

In the first place, use orthochromatic plates. Their manipulation is exactly the same as that of the ordinary plate, and their rendering of clouds and distance is so far superior that they are by long odds the best plate for outdoor work. The sky being by far the most strongly lighted part of the view is, under ordinary circumstances, always over-exposed. So the development necessary for the balance of the plate carries it clear beyond the point where the delicate lights and shadows of the clouds will print, leaving the sky as viewed on the negative a blank, opaque expanse.

Here are 2 methods for "saving" the clouds, either of which will much improve the negative: In one the end is accomplished by restraining the development of that part of the plate, and in the other by local reduction after the negative is developed and fixed.

In the former, as soon as the sky and clouds appear fairly well defined remove the plate from the developer, and, with a tuft of absorbent cotton wet in a 10 per cent. solution of bromide of potash, rub the part of the plate you wish to restrain lightly but briskly with a circular motion, getting as close to the sky line as convenient. Return plate to the developer and finish as usual. With everything ready, applying the bromide need not keep the plate out of the developer but a few seconds.

When using the other method the plate is developed and fixed as usual. Have on hand a saturated solution of red prussiate of potash, and mix a little of it with about 4 times its volume of water. Exact strength does not matter. When thoroughly fixed take negative from the hypo and apply the potash solution to the sky with a tuft of cotton, in the same way as when using the bromide. Watch the effect closely and return the negative to the hypo occasionally for 2 or 3 seconds at a time, to blend the reduction between sky and landscape.

This latter method will be found excellent for the reduction of any of the harsh high lights which are frequently found on negatives.

A. Neal, Macon, Col.

PLEASE READ THE CONDITIONS.

Many of my readers who have sent in pictures for the photo competition seem not to have read carefully the conditions governing the contest.

One paragraph in these conditions, which has been printed in every issue of *RECREATION* the last 6 months, reads:

"Subjects are limited to wild animals, birds, camp scenes, and to figures or groups of persons, or domestic animals, representing, in a truthful manner, shooting, fishing, amateur photography, bicycling, sailing, or other form of outdoor or indoor sport or recreation."

Notwithstanding this plain, simple rule, some 200 pictures were submitted which are not admissible under any of the heads given. For instance, one of these, entitled, "My Assistant Bookkeeper," shows a little girl sitting at a desk. Another shows a group of darkies standing near a house and doing nothing but staring at the camera. Another is a moonlight view of a portion of London, Ont. Several others show bunches of cattle, sheep or horses. Still another shows a bird's eye view of a part of Chicago, from

the Ferris wheel; another, 3 dogs in a wheelbarrow, and not hunting dogs either. There are at least 50 views of scenery, without a figure or an object of any kind in sight that in any way illustrates any form of indoor or outdoor sport or RECREATION.

The majority of contestants have learned the important lesson of not allowing their subjects to look at the camera; but there are still a few who insist that even though a man may be engaged in playing an imaginary trout, or aiming his gun at an imaginary bird or deer, he must still give his neck another twist in order to look at the camera, while having his picture taken.

The object of the photographer in all such cases should be to make the action in which the subjects are engaged appear real. When a man is really doing anything in the way of outdoor sport, he is not supposed to be having his picture taken. There are many notable illustrations of the proper way of doing this, and some of them have won prizes. Consequently their photographs will be published in future issues of RECREATION.

MYSTIFIED THE INDIANS.

There is a photographer in Chicago who had lots of fun a few months ago with some Arizona Indians.

It seems that last year, when the Navajos were having their snake dance, he was sent out there by a moving picture concern to get a series of negatives. He didn't succeed, because the savages were too shy and suspicious; but he caught some of them at their sports at an agency store, 17 miles North of Cañon Diablo.

This year he went out to try the dance again and took his exhibition outfit along. Reaching the store he invited the Indians to see the show. About 600 came, and he put up a screen behind the store one night and shot off the pictures.

The Indians gazed at the various scenes with open mouths, apparently not comprehending. When the moving railway train was shown, growing from a pin point on the horizon till it filled the whole frame, seemingly rushing down upon the crowd, they gasped in unison and would have fled had not the interpreter reassured them. The march of soldiers was something that most of them had seen, but the exhibition drill of the Kansas City Fire Department was an uncanny mystery.

The climax came when the pictures taken on the same spot the preceding year were reproduced. Most of the Indians had been present when the pictures had been taken.

Many of them almost shrieked when they saw themselves in action as they were in the chicken pulling contest and in the races of last August. Last year a popular clerk,

since gone away, had carelessly walked across the instrument's field. The Indians shouted as they saw him again on the canvas.

Real enthusiasm was caused by the passage across the screen of the trader's well-known dog.

When the entertainment was over the Indians crowded around the screen, feeling the canvas and rubbing their cheeks on it, chattering noisily in their amazement.

THE NEUTRAL BATH.

In the September number of RECREATION you say, quoting the Eastman people: "We recommend neutral bath and advise testing with Squibbs' litmus paper."

(1) How much borax, or the saturated solution of borax, should be added to the 48 ounces of water and 1 grain chloride gold? Of course I mean approximately.

(2) What is meant by toning by transmitted light for high lights and half tones only?

(3) Are solio prints fixed without toning permanent?

F. T. Morgan, M. D.

ANSWER.

1. As the quantity of surplus acid in the chloride of gold solution is not known, the exact quantity of borax required to make the solution neutral cannot be stated, and can only be found by experiment. The gold solution will turn blue litmus paper red, and one should add, drop by drop, enough solution of borax to make the gold bath turn the red litmus paper blue. The bath is perfectly neutral when both colors are left unaltered, but as the prints toned in the bath tend to make it acid a slightly alkaline action of the bath when prepared is advisable.

2. This means the tone of the print should be judged by holding the print up against the light and looking through it and not by what it appears to be when looking at the print in the dish. As the high lights and half tones are more sensitive to change than the darker portion of the print, one should watch the former and stop toning when they have attained the desired tone. The shadows will then take care of themselves. It will be found that the dry-finished print will look like the wet print with transmitted light, and this explains why one should look through the wet print instead of at it to judge its final appearance.—EDITOR.

A BIG SAVING.

When I began to print and tone my own photos I used solio toning and fixing solution, sold at 50 cents an 8-ounce bottle, and which, diluted with 16 ounces of water, makes 24 ounces of bath. But lately

I found the formula for a toning and fixing solution, which I give below. I am told that it resembles Eastman's. It may be the same thing for all I know, but it stands on its own merits with me. As this bath has no name I will take the liberty of calling it the Green Mountain Toning and Fixing Solution.

Solution No. 1.—Hypo, 8 oz.; alum, 6 oz.; sugar (white), 2 oz.; cold water, 80 oz. When dissolved add borax, 2 oz. dissolved in 8 oz. hot water. Let the above stand over night and pour off the clear liquid for use.

Solution No. 2.—Pure chloride of gold, $7\frac{1}{2}$ gr.; sugar of lead, 64 gr.; water, 8 oz. It should be shaken before use and not filtered.

To tone 15 to 20 4x5 prints take 8 ounces solution No. 1 and one ounce solution No. 2. Tone to desired color and place in the following stop solution for 5 minutes:

Salt, 1 oz.; water, 32 oz.

As some camera cranks kick on the plea that prints finished with combined toning and fixing solutions fade, fix them (the prints, and the kickers, too, if you like) once for all in the following solution for 10 minutes after first rinsing in cold water:

Hypo, 1 oz.; sulphite of soda, 60 gr.; borax, $\frac{1}{4}$ oz.; water, 20 oz.

Don't use the toning and fixing bath warmer than 50 degrees Fahr. The total cost of the 3 solutions—96 oz. in all—is 34 cents.

A. W. Buswell, Barton, Vt.

PHOTOGRAPHS TAKEN BY MAGIC.

A magic photograph is a photograph which can be made to appear on an apparently blank piece of paper. The process of making it as follows: Make a photographic print on a piece of albumen paper, printing it the exact size desired in the finished print. Wash for 2 or 3 minutes and place, without toning, in fixing bath composed of one ounce hypo. and 8 ounces of water. Leave the print in the fixing bath 5 minutes; wash thoroughly, then place in a saturated solution of bichloride of mercury until the picture has entirely disappeared. Leave it in this solution just long enough to bleach out the print; then wash and dry as for other prints. The paper now appears perfectly white, but contains a latent or invisible image. The magic by which the picture is made to appear is the action of hyposulphite of soda. Soak a piece of clean blotting paper in a saturated solution of hyposulphite of soda, and dry. When it is desired to make the picture appear, moisten the blotting paper slightly, and place the picture on it, face down, rubbing it to insure perfect contact. In a

minute or 2 the picture will appear, and will soon be as bright and clear as when first printed. When one wishes to show this magic photograph, it is more surprising to the uninitiated if the blotting paper has been moistened and placed in a book. Show the apparently blank piece of paper, slip it in the book, and in a minute or 2 take it out, and what was to all appearances a piece of plain white paper will be found to have a picture on it. The picture will disappear after being exposed to light, but can be made to reappear indefinitely.—Hobbies.

STEREOSCOPIC VIEWS.

Those who have a 5-7 or 5-8 New Model camera, or one of similar type, and who wish to make truly stereoscopic views without going to the expense of buying 2 4-5 lenses will find the following helpful:

Obtain or make a new lens board, mark it exactly in the center, and from this point take $1\frac{5}{8}$ inches to either side. With a compass make a circle the full size of the back of lens tube. Cut out and take the threaded collar from the other board, screw it on the new board over the hole, and put the tube and lens in position. Get a piece of black or dark stiff paper or cardboard and cut it to fit in the flange where the holder is attached to the camera. Cut this card in 2 equal pieces, only one piece to be used, to slide to one side or the other to protect one-half of the plate. Put in the holder a plate of suitable size—say, 5-7—and arrange your subject to be photoed. Put your lens board with the lens to one side (left side preferable), and your cardboard to the opposite (right) side; then focus and stop to suit. Put plateholder in position and draw the slide over half way out—this will help you to remember, that the slide must be pushed clear back before taking the holder off. Expose by cap or shutter, push the slide in, slide the cardboard to the left side and reverse the lens board with the lens to the right. Place the plate holder in position again, draw the slide out altogether, and expose the same length of time as before. Be careful not to move the camera between the 2 exposures.

Will some one give the formula for making the mucilage used on the back of postage stamps?

C. J. M., Shelby, Ia.

CHEAP LANTERN SLIDES.

I have the following method to produce fairly good slides at a small cost. The emulsion is equally good for watch dials, leather, etc. Have a druggist put up in separate packages: Rochelle salts, 5 grains; silver nitrate, 30 grains; ammonium, chloride, $2\frac{1}{2}$ grains; alum, $12\frac{1}{2}$

grains; citric acid, 15 grains; gelatine, 2 drams (liquid). These, with 26 ounces distilled water, are the ingredients. Cost, about 15 cents, enough for some 40 plates.

Heat the water and dissolve the gelatine in $1\frac{1}{4}$ ounces of it. It is best done by having a glass in a tin of water on the stove, and at night by lamplight. If you can't get liquid gelatin, a package of best English dry gelatin will do. Dissolve enough of it in the $1\frac{1}{4}$ ounces of water to make it the consistency of thick cream. Dissolve the alum, salts and ammonium chlorate in 12 ounces of the remaining water and add it to the dissolved gelatin. Stir with a glass rod and it will turn to a thick, glue-like and evil-smelling mass. Dissolve the silver and citric acid in the last 12 ounces of water; then add it to the odoriferous jelly, and the whole will become liquid again like milk.

Have your plates perfectly clean and in hot water. Take out a plate, flow with the emulsion and lay in a dark and level place to dry. If the emulsion be too thick, thin it with hot water. When the plates are dry they can be used any time. Flow on the gelatin as thinly and evenly as possible. The printing is done by sunlight, same as any silver paper. It is then toned in gold bath and fixed as with paper. Remember to wash thoroughly.

Francis Hope, Midland, Mich.

GOLD TONING BATH.

Would like some advice regarding single gold toning baths for solio and aristotype papers. I have had difficulty in getting mine to work. Sometimes it positively refuses to tone. Perhaps I neutralize it too much. I should also like to know of a good acid and alkali proof cement for mending hard rubber trays.

M. B. Paine, Jr., Charleston, S. C.

I referred these inquiries to an expert photographer, who replies as follows:

Mr. Paine probably does not eliminate all the free silver from his prints before trying to tone. Wash in a number of changes of water first and then tone in the following bath:

Water, 16 ounces.

Gold solution (1 grain to ounce), 1 ounce.

Bicarbonate of soda, 20 grains.

Add 16 ounces water.

Tone but a few at a time, and turn the prints constantly. Use lukewarm water. Cold will work slowly.

To mend hard rubber trays, use boiling water till soft, then bring the joints together. Some use a hot iron. Some patch them with sheet-rubber and rubber dissolved in chloroform. Gelatine solution with a little bichromate of potash will mend anything if thoroughly sunned

three days before use after mending. Bichromated gelatine is insoluble after exposure to the action of light for some time.

A CHEAP AND SIMPLE PICTURE FRAME.

Wishing to frame a number of RECREATION's full page illustrations, and not being able to find frames that suited me, I tried passe-partouting them. I can buy, in art stores, a ready-gummed picture binder, and find the work can be done quickly, easily and neatly. The binding paper referred to is about an inch wide, and each package contains 10 yards. It is put up in different colors, costs but 10 cents a box and is the only thing I have yet found that will adhere satisfactorily to glass. I use broken panes of glass and cut to size desired with a 5-cent glass cutter. About 20 pictures that I mounted cost me less than 50 cents. I cut the glass, picture and cardboard backing all of the same size. Then cut off strips of the gummed paper, dampen, and lay them on the table before me, gummed side up. Lay edge of glass on edge of paper, so as to form such margin as I desire to have show on the front, and press until the gum hardens. I attach similar strips to all 4 edges of the glass. Then lay the picture and backing on glass, redampen the extending edges of the binder, draw them tightly over edges of glass and stick them to the backing. Two cloth loops for the picture cord, gummed to the backing, finish the job.

Al. Harris, South Superior, Wis.

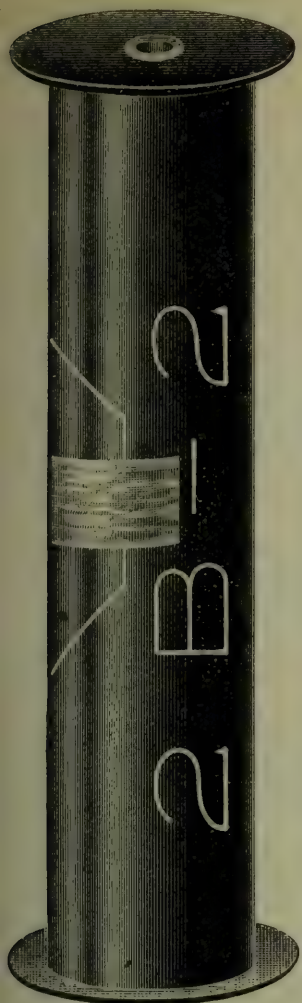
A GOOD SOCIETY.

The World Wide Photo Exchange, I think, deserves its name. It was organized Feb. 1, 1898, and has a membership of almost 400. Nearly, if not every state in the Union is represented, and it has members in Jamaica, England, New Zealand, Canada, and Mexico.

The principal object of this society is to afford its members facilities for the collection of photographic prints. To this end, it sends monthly to each member a copy of the list of members who have joined during the month previous, together with the names of their cameras, size of their prints, and a general idea of the subjects they have to exchange.

Exchanges are made by mail, through direct correspondence. The basis of exchange is generally one 4x5 unmounted print. Another object of this society is the mutual improvement of its members in the art. Twenty-five cents is the fee for a year's membership.

A trial year will convince anyone that the W. W. P. E. is the most beneficial organization of its kind. Send 25 cents to F. R. Archibald, Sec'y, Rock Creek, O.



2 & 6 Exposure Cartridges

Now and then, especially in winter, the amateur wishes to make from two, to half a dozen pictures but does not care to use up an entire spool of a dozen exposures before development. To provide for this we have now prepared to furnish daylight loading cartridges, for two or for six exposures. For work at home then, as well as for one's outings, the Kodak becomes more convenient than the plate camera. No dark room except for development, no bothersome plate holders or dark slides.

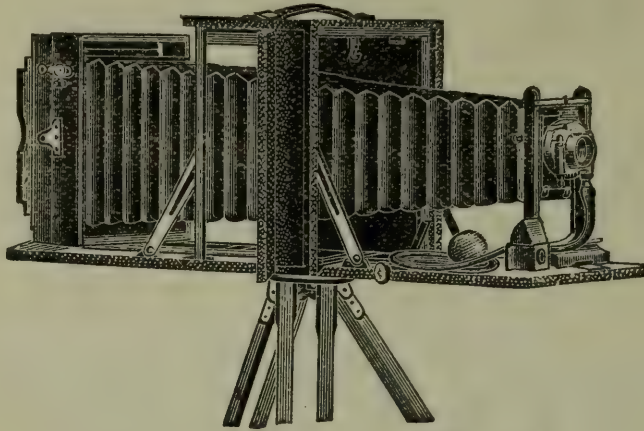
	6 Exposure Cartridges, each.	Packages 2 Cartridges, 2 Exposures each, (4 exposures).
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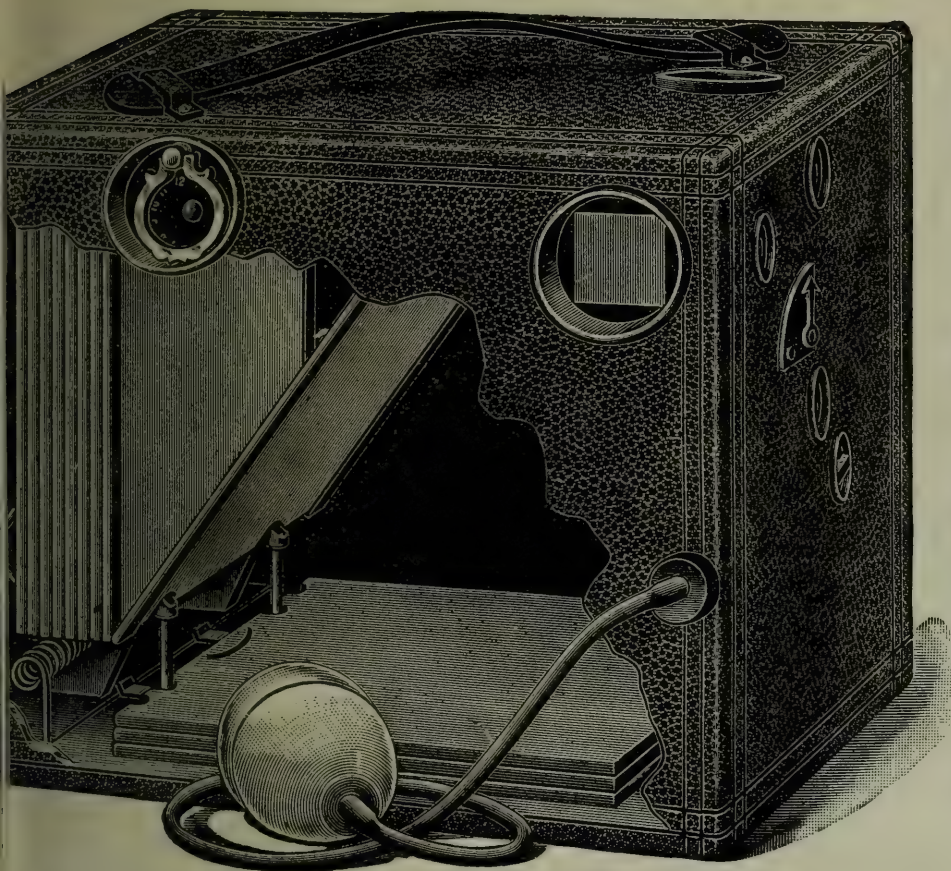
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I wish to thank the writer of an article
 in November, '98, RECREATION entitled
 "Hunting a Holiday." After reading it I
 wrote to several persons mentioned in it;
 finally deciding to put myself in the hands
 of John Lifsey, of Garysburg, N. C. I re-
 mained with him a little over a week. We
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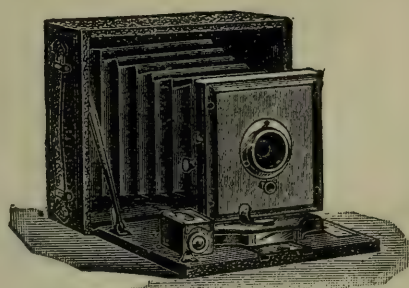
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little book was compiled by me to embody the proven results of my 30 years' experience as a specialist.

It is a guide to men, both single and married, offering much valuable advice and outlining a course to pursue for the greatest possible development of manhood, both physical and mental. It deals with private diseases which cannot, with propriety, be discussed in this magazine. It tells that strength once dissipated may be regained by nature's treatment

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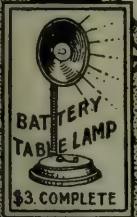
Non-residents prohibited from killing game in Missouri.

Sheriffs, constables, marshals, market-masters, police officers and other State and county officers' duty to arrest persons violating.

I think the provisions of the New York law prohibiting the sale of game in close season is a good one. I have been working hard to have a bill presented before our legislature which will prevent the sale of game or fish in this State at any time. I have talked with some influential men, both in Seattle and here, who favor it. I consider this one of the surest ways of preventing the wholesale slaughter of game of all kinds. As long as there is a law allowing game to be sold, it will be hard to prevent market hunters from slaughtering.

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Robert Leidig, Vandalia, Ill.

The Kenwood cape arrived O. K. and I am more than pleased with it. We had a regular blizzard Saturday, and I wore it. It fills the bill all right. I expect to use it next fall when watching the runway for deer.

S. M. Eaton, Watertown, Wis.

The Ithaca gun earned by a club of new subscribers to RECREATION was received O. K. Am highly pleased with the beautiful present and cannot see how you can give such liberal premiums.

Jno. A. Baker, Ripon, Wis.

The Forehand gun came to hand to-day and it is a beauty. I extend to you my sincere thanks, as well as my son's, who is now in his glory.

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My camera arrived promptly and I thank you and the Eastman Kodak Co. The way you do business is simply splendid. The camera looks well and works well.

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The Lefever gun reached me promptly and I am highly pleased with the little beauty. The weight is just right. Please accept my hearty thanks for your liberality.

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N. Schiffler, Brilliant, O.

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C. G. Kawaga, Hepler, Kans.

The Adlake camera you sent me for 15 subscribers to RECREATION came to hand promptly. I am more than pleased with it.

P. Carnahan, Carthage, Mo.

I am highly pleased with "The Big Game of North America" you sent me as a club premium.

C. H. Little, Merriam, Neb.

Let me thank you for the beautiful watch you sent me for a club of subscribers to RECREATION.

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Manager O'Connor, of the Oasis, arrived in Greeley Friday, after a 2 weeks' camping, hunting and fishing trip on the Laramie river, at the foot of Medicine Bow range. The party comprised D. A. Holaday and son Horace, F. L. Catlin and son Arthur, and Arthur Brinker of Denver; H. H. Shaw, Boston; Jay Hiskey, a merchant of Boulder; D. M. May, a Berthoud merchant, and Mr. O'Connor. They met at Fort Collins, and went up the Poudre to Link's ranch on the Laramie. Dunk Holaday was elected captain of the outfit, Frank Catlin, chief hunter, and C. J. O'Connor, commissary. When they reached their camping ground, Captain Holaday called the party together and made the following speech:

"Gentlemen—We are sportsmen and out for pleasure and recreation, not pot-hunters, nor game-hogs, anxious to proclaim to the world that we do not know the difference between slaughter and sport. I expect that no trout less than ten inches in length will be brought to camp; the game law allows us to catch them eight inches long, but unless we are brought to the verge of starvation I think we can go two inches better than our friends in the legislature. In the matter of deer, only bucks can be shot, and if I hear of any of you shooting a doe or fawn I will endeavor to satisfy myself fully on the matter, then report you to the game warden, and I pledge you my word I will do my level best, that you may be punished to the fullest extent of the law."

The party obeyed the law as expounded by its captain. Fishing was good, feathered game plenty, and Mr. Catlin shot a buck that dressed about 200 pounds.

While there they were informed on reliable authority that a porcine party from Fort Collins caught everything in sight, so anxious were the members to outdo each other in big baskets. Hundreds of young trout were caught, no larger than minnows, and after the day's count had been made these were thrown away as useless for food, instead of being left in the river to keep up the stock.

Holaday and his party came home with clear consciences and an abundance of good health. Mr. O'Connor says he never had a more enjoyable time.—Greeley, Col., Tribune.

It is a most delightful experience to

turn occasionally from an account of the ruthless slaughter of fish and game to a story like this. It is more gratifying than I can explain to lay down the branding iron occasionally, and take off my hat to some party of fellows like these. I should like to shake hands with every one of them, pat them on the back and tell them to their faces how I admire them.

I wish I could get a report every day from some hunting or fishing party who go into the woods with such advice and warning ringing in their ears as was given these gentlemen by Captain Holaday. Gentlemen, if any of you ever come to New York you can have anything within reach of 23 West 24th Street.

"So the whole thing ends in both of us being obliged to give up the throne," said one Samoan king.

"Yes," answered the other. "It's the old story of competition being crushed out by combines. If you're not in the syndicate there's only one thing to do, and that's abdicate."—Washington Star.

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Put up in convenient packages enough in each for two big pies.

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we can do the Fifth Avenue style of work at modest prices. Give us a trial and we will convince you of the truth of these statements.

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Merchant Tailor,

155 West 23d St., New York.

The game hog's friend, "Forest and Stream," recently makes editorial comment that the supply of game in Europe is not diminishing, notwithstanding the enormous kills made there. Evidently he intends to contrast the hogs of the Old World with those of this country and to imply a better condition here. He forgets that in the old countries the nobility are the only ones who can hunt. The people have no opportunity. The editor of "Forest and Stream" would show himself more of a man if, in defiance of all laws, he would speak right out and say to the hogs, "Kill, kill, kill." Then we would know him for what he is. Sock it to the game hogs, Mr. Editor.

E. D. S., Menomonie, Wis.

Father (to son, from whom he has just accepted a cigar): "Excellent! How much did you pay?"

Son: "They're 3 for a quarter."

"Great Scott! And I content myself with 2 for a nickel!"

"That's a different matter. If I had as large a family as you to support I shouldn't smoke at all!"—Life.

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Williamsport, Pa., Aug. 31, 1899.

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Yours truly,

WEST END FURNITURE & CARPET CO.

Wm. Linck

A FEARLESS GAME WARDEN.

I have just returned from a trip up the John's Brook valley, camping near the foot of Mt. Marcy and the Gothics. It was a still hunt, and we did not expect to get anything but the fun of it. That's what I got, though we did see some deer.

This region was formerly hounded to death, and 3 years ago it was difficult to start anything with dogs. To-day the ground is covered with deer tracks in all directions. My guide is sure there are now at least 150 deer in that basin. While we were there a party of hunters came up. They all agreed they had never seen anything like it, and that it was the result of not hounding. In going up we followed a lumber road most of the way, but returned through the woods, away from the choppers. We found plenty of deer signs to the edge of the woods, a mile back. When hounding was permitted the deer did not come within 3 or 4 miles unless driven.

I don't know whether you have heard from Horace Braman, the League warden here. He went for a party of 7 or 8 who were hounding, some 15 miles South of here. They shot at him several times, but he got behind a tree and sent in his bullets so fast and close that the men promptly surrendered. He arrested 2 of them. Have heard that one had since escaped. They found he could not be frightened. Was glad to hear this, as he was appointed on my recommendation.

You had some mighty good illustrations in the November number; woods pictures that looked as if the artist had been there.

H. S., Keene Valley, N. Y.

QUAILS COME HIGH.

Louisville, Nov. 9.—The Chase-Davidson Company was fined \$10 for each of 3 birds offered for sale to George A. Newman, Jr., who visited the store with a view to a prosecution under the game laws. The decision was announced by Judge McGee, who tried the case.

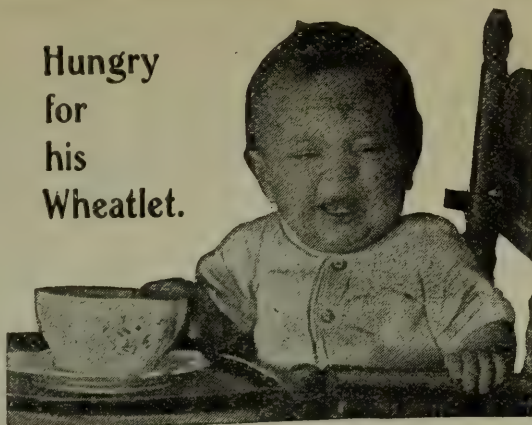
The defense was that the birds were part of a cold storage lot from last year's open season. Judge McGee held this plea of no avail, as the law provides a penalty for having birds in possession out of season.—Owensboro, Ky., Messenger.

That's right, Judge. Soak them every chance you get, and sportsmen will rise up and call you blessed.—ED.

Darling, my love grows day by day,
I hope and pray it ever will;
I've heard you sing, I've heard you play—
Yet spite of that I love you still.—Judge.

The only hero who can stand the test and not make a fool of himself is a dead one.—Leavenworth (Kan.) Times.

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his
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THE FRANKLIN MILLS CO., LOCKPORT, N. Y.

There are some hunters who, seemingly, never grow weary of slaughtering game as long as it is within gun shot. A party of Madera hunters consisting of C. F. Toby, J. F. Dalton, E. J. Leonard, J. C. Straube, W. S. Patterson and C. J. Eubanks, killed 850 doves on the Dalton and Rhea ranches one day last week.—*San Francisco Examiner*.

Here is another great daily that has championed the cause of game protection and of decency in sport. If the Examiner will continue to thus stigmatize the men who slaughter innocent birds it will soon command the respect and the support of all decent sportsmen everywhere.

Recently I shot a loon with a rifle, and it floated not more than a minute, belly up, and sank. Parties who did not see it scoff at the story, but several persons saw it and can testify to the fact, for the shot was made from my cottage piazza. I am anxious to learn whether any of the readers of RECREATION have had a similar experience.

W. F. Audds, Chippewa Bay, N. Y.

The automobile rattles by the door,
I tackle horseless sausage and sweet
cream;
The cowless milk in coffee comes no more.
I've struck the hashless boarding
house—my dream.
—Cleveland Leader.

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Lighter weight sweater, same kind, . . . \$1.50

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Chas. J. Campbell, Englevalle, N. Dak.

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Address Howard Eaton, Medora, N. D.

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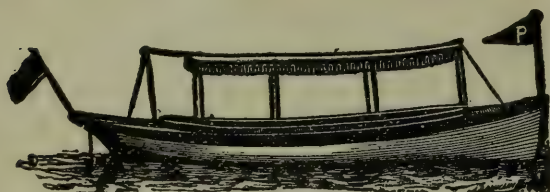
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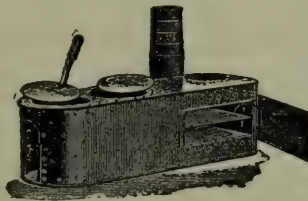
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Under the revised game laws of Connecticut no person shall kill (and no person shall have in his possession, except a regular marketman or hotel or restaurant keeper) more than 5 ruffed grouse in one day, or 36 in any one year, under penalty duly provided. I consider this a step in the right direction on the part of the fish, forest and game preserve committee.

The next step after restricting the ravages of the genus *homo*, with his murderous snare and gun, should be to place a bounty on certain furred and feathered poachers on the green field, viz., the owl, hawk, skunk and the sly genus *vulpes*. The depredations of these vandals of the still hunt are hardly realized by many sportsmen. We could well part with these destroyers of the unhatched "clutch" and infant brood. The results of such needless extermination are only too evident as one strolls through miles of our gameless groves and brush; the quiet unbroken save by the plaintive note of the wood thrush, or the saucy challenge of the ground hackie as he scurries to cover, only pausing as he enters his hidden burrow to take a parting glance at the cause of this unwonted intrusion. The flight of the quail, the swift whirr of the ruffed grouse and the rise of the woodcock are pleasing sights that too infrequently greet the sportsman in our Eastern States. The blame for this "voiceless field and silent grove" lies largely at our own doors, for, properly protected, these game birds should be as common as the red-breast. RECREATION enlisted in a noble cause. Let the good work go on!

H. L. Wood, M. D.

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\$4200 Reward!

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The Shortstory Publishing Company, Boston, Mass., will pay \$4,200 in cash prizes, ranging from \$100 to \$500 each, to those who will tell in writing some unusual experience, thrilling adventure, or fascinating freak of the imagination in a style that will interest the hundreds of thousands of readers of *THE BLACK CAT*, the unique shortstory magazine which has won the title of "The story-telling hit of the century." This prize competition is open to all, and each story will be judged solely upon its merits without regard to the name or reputation of its writer; *but no story will be considered at all unless it is sent strictly in accordance with the printed conditions*, which will be mailed free, postage paid, to any one, together with 5 complete specimen stories, and many of the names and addresses, as references, of the men and women in all parts of America who have received over \$30,000 cash, for *BLACK CAT* stories, also information of real value to all who are interested in earning money at home. Send address at once, as the contest closes March 31st. The Shortstory Publishing Co., 150 High-Hartford Street, Boston, MASS.



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BECAUSE those streaks of lead and rust must be removed if you don't want trouble and expense of sending barrels to the factory for costly repairs. (A close examination will often reveal lead streaks or rust).



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106 Cortland Ave., Syracuse, N. Y.

HOW TO REACH THE COOK'S INLET COUNTRY.

I receive so many letters asking how to reach the big game of the Kenai peninsula that I send the following for publication: The Kenai peninsula is the only section of country in the United States where moose, caribou, mountain sheep (both white and steel gray), mountain goats and cinnamon and black bears are found within easy reach of tidewater.

It is a long and expensive trip, and can only be made by those who have ample time and money at their disposal. But for those who are willing to take the chase where the discouraged hunter leaves off and where the true sportsman begins, there are some record-breaking heads and horns to be secured in the Cook's inlet country.

The fare by steamer to Juneau, Skagway or Sitka is about the same. Better buy a ticket to Sitka and then you will see much more of the country. At Sitka take the steamer for the Westward, to Cook's inlet, 600 miles farther. These steamers leave Sitka on or about the 14th and 28th of April, May, June, July, August, September and October for Kadiak and return, calling at the inlet *en route*.

The best time to make the trip is in July or August. The start from Sitka should be made not later than the latter part of August. The points where the hunters usually disembark are Kassilof or the Kenai river canneries, there taking canoes for the large lakes at the heads of these rivers, some 40 or 50 miles inland. Game is abundant in this section. So are black gnats, moose flies and mosquitoes, and head-nets and mosquito-proof tents should be brought along. I would recommend woolen underclothing, as at night the temperature falls considerably; ordinary woolen clothing or soft corduroy for outside clothing; light, high-topped rubber hunting boots (no leather soles), a good hunting shoe, not too heavy, and a pair of wading pants for trout fishing,

which is excellent in this section. If you want trout in a hurry, use a double hook and bait with salmon roe. All the streams and lakes are full of salmon, and it is no trouble to secure bait. Folding canvas boats should be brought along. For firearms I would recommend a .30-40 Savage or Winchester carbine, soft nosed bullets and smokeless powder, and a 12-gauge gun of any good make.

Fairly good Indian guides can be had at Homer, Kassilof or Kenai. Provisions and blankets can be bought at either of these points. By all means bring an eider-down sleeping bag, as they are light, warm and compact. They sell in Seattle for \$30. Owing to the long distance and time required for correspondence, arrangements should be made for this trip months in advance. The time required for the trip would be 2½ to 3 months, and its cost about \$50 a man.

L. L. Bales, Haines Mission, Alaska.

St. Ignace, Mich., Aug. 3.—Deputy Game and Fish Warden Brewster, of Grand Rapids, has 8 persons under arrest here for being implicated in the killing of a large cow moose at Brevort lake last Saturday. They are a party of resorters who were camping. The case will be heard in court to-morrow morning.

The above appeared in the Courier-Herald of this city.

Clarence L. Cowles, Saginaw, Mich.

An Ohio paper publishes a dispatch from Delaware, that State, in which it is claimed that Charles Boyd, a farmer living near there, recently killed a deer on his farm. This is said to have been the first deer seen in that vicinity for many years. Can any one tell where it came from?

I buy RECREATION every month and devour it from page to page. It is the best sportsman's magazine published, and I like the way you roast the game hogs. I used to be one myself, but have become enlightened since I commenced to read your magazine.

O. S. Sked, Easton, Pa.

I consider RECREATION the best magazine of its kind. It will soon have the largest circulation of any magazine in this country, and the people who advertise in it will have the best business.

Robert H. Tator, Bridgeport, Conn.

RECREATION is the only sportsmen's magazine.

Harry Hamilton, Atlantic City, N. J.

I think RECREATION is the finest journal published.

L. J. Harkness, Bridgen, Ontario.

RECREATION is the best magazine I have ever read.

B. S. Campbell, Portland, Oregon.

I think RECREATION is the most interesting and instructive sportsmen's magazine published.

John McCombie, Quebec, Canada.

The more we people here see of RECREATION the better we like it. It is the finest magazine of the kind I ever saw.

Robert H. Searcy, Eufala, Indian Ty.

RECREATION is the best sportsmen's magazine published.

James J. Phillips, McFall, Mo.

RECREATION is a good thing. Push it along. I will help it all I can.

John A. Tunwall, Lynn Centre, Ill.

RECREATION is the best sportsmen's journal I have ever seen.

Jos. King, Baltimore, Md.

Everybody deems RECREATION the greatest hunting and fishing magazine of the 19th century.

Chas. F. Fries, Granite Falls, Minn.

All my subscribers say RECREATION is the best sportsmen's magazine they ever read.

C. J. Oeffner, Alliance, Ohio.

Recreation is the best periodical of its kind I have ever read.

J. Parshall, Commerce, Mich.

Everybody likes RECREATION. It is the best magazine published.

T. W. Clumpner, Kenton, Mich.

RECREATION is the best magazine I ever saw.

Ralph Swartz, Philadelphia, Pa.

RECREATION is counted the A No. 1 book of our house. Its shining cover fills me with glee. Could not do without this true little magazine, and it is the champion of the world in the protection of game.

Arthur J. Thompson, Pasadena, Colo.

I can wait for dinner but not for RECREATION. Like Sheard, I say, no lovey dovey stories for RECREATION. Give us more real true moose and bear, blood and hair, hot lead and cold steel.

P. O. Beale, Lisbon Falls, Me.

Impossible to do without RECREATION. It is the only sportsmen's magazine published.

C. O. Davy, Cache Junction, Utah.

I have been a subscriber to RECREATION for 2 years and expect to be as long as I can raise the dollar and the magazine retains its present policy of giving its subscribers the biggest and best magazine of its class and giving the game hogs—well, hail Columbia. I take several papers and magazines on field sports and yours is the best.

W. H. Jacoby, Dodge City, Kansas.

I would not be without RECREATION for twice or 3 times the cost.

E. Haeni, Freeport, Ill.

Was Devoid of Hair

WHAT A FREE TRIAL PACKAGE OF A REMEDY DID FOR HER.



MISS EMMA EMOND.

Miss Emmond lives in Salem, Mass., at 276 Washington St. and naturally feels very much elated to recover from total baldness. The remedy that caused Miss Emmonds hair to grow also cures itching and dandruff, sure signs of approaching baldness and keeps the scalp healthy and vigorous. It also restores gray hair to natural color and produces thick and lustrous eyebrows and eyelashes. By sending your name and address to the Altemheim Medical Dispensary, 380 Butterfield Bldg., Cincinnati, Ohio, they will mail you prepaid a free trial of their remarkable remedy.

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THE 1900 SPORTSMEN'S SHOW.

Preparations are being made to have the sixth annual Sportsmen's Show the grandest of any yet presented to the public. New and attractive features are now being arranged for, and exhibitors are taking space months ahead of the opening date, in order that they may secure desired locations and have ample time to arrange handsome and attractive exhibits. The manufacturers of boats especially require more time than other exhibitors, to build specimen craft. This year the boat exhibit will be made a feature, and some new and handsome designs in canoes, yachts, launches and motors will greet the sportsmen who are always on the alert for the latest invention in this line.

Attractive features are being arranged for the aquatic sports, which will take place in an immense tank about the same dimensions as that built for the Sportsmen's Show last year. There will be contests in swimming, canoeing, tub races and water polo, which proved so interesting and attractive.

A big game park, containing deer, elk, buffalo, caribou and moose will furnish an extensive exhibit of live game animals, besides which there will be exhibited in large cages, made specially for them, mountain lions, cougars, bears and a larger variety of these wild game animals than has ever before been exhibited. There will be a complete exhibit of live game birds, including quails, ducks of every variety, pheasants, swans, geese and other rare specimens.

The fish exhibit will be the most attractive of any yet given, and will be under the direct supervision of our State Fish Commissioners.

An Indian village will occupy a large portion of the Garden near the lake. The camp will be a faithful representation of an aboriginal village, with birch bark teepees inhabited by Indians and their families, clothed in picturesque habiliments of savage life, and engaged in canoe building, trap making, etc. The squaws will do basket and bead work.

The Association championship and other events at inanimate targets will be held on the roof of the Madison Square Garden, same as last year, and under the same management.

Revolver and rifle ranges will be under expert supervision, and new inventions in powder, revolvers and rifles will be there for inspection. The decorations will be something entirely new and artistic. There will be log cabins, spruce and pine trees, which will add to the forest effect.

The space in Madison Square Garden is limited, and this year the features which have proved so interesting and attractive to sportsmen and the public generally, will occupy all of the ground floor. Exhibits of sportsmen's goods, guns, ammunition,

fishing tackle and golf goods will be confined strictly to the gallery. Spaces for exhibits are now being reserved as applications come in, and the management wish to say to new exhibitors that space for trade exhibits will be limited as compared with former years. Those intending to take space should give notice at the earliest possible moment.

MT. KATAHDIN DEER.

In October the doctor and I packed our traps and started on a 2 weeks' trip to Maine.

We reached permanent camp on the second day, going up the Penobscot through lakes and over no less than 5 carries. The second of these, Pasmagamac, interested me the most. It was extremely rocky and picturesque, and the water was swift; a place that would tempt most anglers.

Game was seen almost every day after arriving in camp. On Friday we started on a hunt over the foothills of Mt. Katahdin. We hunted all the forenoon and saw no game. After dinner we separated. As I was sauntering slowly through the woods I noticed a movement in some thick brush bordering the river. I stopped and soon out walked the handsomest animal I ever saw. He had been down at the river to drink and was returning to higher ground. His head was thrown backward until his antlers lay on his shoulders. I managed to remember my gun, and fired just as he stepped upon a large, flat stone. He fell, and on going up I found him on the rock, shot through the neck. I shouted lustily for my guide, who, on seeing my buck, tossed up his hat, yelled and acted altogether like a schoolboy. As we were miles from camp we dressed the buck and hung him up, to be called for later.

After that, nearly every day brought us game. On the following Monday the doctor and I were hunting in the same direction, about 60 yards apart. I noticed a deer running from us. As he was running through thick woods I had to look for an opening through which to shoot as he passed. Just as the first motion appeared in front of the gun I fired. The buck dropped, shot through the middle of the back. He was about 60 yards distant and running down hill. As I had many times allowed deer to escape me under similar circumstances I felt I had solved an important problem.

E. C. A. Becker, Worcester, Mass.

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Detroit Free Press.



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The Fear of Humbug

Prevents Many People from Trying
a Good Medicine.

Stomach troubles are so common and in most cases so obstinate to cure that people are apt to look with suspicion on any remedy claiming to be a radical, permanent cure for dyspepsia and indigestion. Many such pride themselves on their acuteness in never being humbugged, especially in medicines.

This fear of being humbugged can be carried too far, so far, in fact, that many people suffer for years with weak digestion rather than risk a little time and money in faithfully testing the claims made of a preparation so reliable and universally used as Stuart's Dyspepsia Tablets.

Now Stuart's Dyspepsia Tablets are vastly different in one important respect from ordinary proprietary medicines for the reason that they are not a secret patent medicine, no secret is made of their ingredients, but analysis shows them to contain the natural digestive ferments, pure aseptic pepsin, the digestive acids, Golden Seal, bismuth, hydratis and nux. They are not cathartic, neither do they act powerfully on any organ, but they cure indigestion on the common sense plan of digesting the food eaten thoroughly before it has time to ferment, sour and cause the mischief. This is the only secret of their success.

Cathartic pills never have and never can cure indigestion and stomach troubles because they act entirely on the bowels, whereas the whole trouble is really in the stomach.

Stuart's Dyspepsia Tablets taken after meals digest the food. That is all there is to it. Food not digested or half digested is poison, as it creates gas, acidity, headaches, palpitation of the heart, loss of flesh and appetite and many other troubles which are often called by some other name.

They are sold by druggists everywhere at 50 cents per package. Address F. A. Stuart Co., Marshall, Mich., for little book on stomach diseases, sent free.

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"Don't let Henrietta hear you allude to her as my better half," said Mr. Meekton behind his hand to the friend who had come to dinner.

"I understand. The expression is a trifle commonplace, not to say plebeian."

"It isn't that. But I wish you'd choose another fraction. It would annoy Henrietta vastly to have you think she was less than four-fifths, at the lowest calculation."
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Don't you think for a moment that I am going to give up RECREATION. It is the best paper I take. It has made me shed my bristles. I was one of those game destroyers of the vilest kind, but your magazine has made a man of me.

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They are well made, handsomely finished, with compartments, racks, drawers and shelves for guns, loaded shells, empty shells, reloading tools, bullets, shot, wads and primers. Or for fishing rods, landing nets, reels, hooks, fly books, rubber boots, and everything else that goes to make up a complete hunting or fishing outfit.

These are excellent specimens of workmanship and handsome pieces of furniture. They are an ornament to any library, dining room, office or den, and every sportsman who has a home should have one of these cabinets.

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Wanted: For cash or exchange for Filipino weapons or curios, a .22 or a .25-20 repeating rifle. Address Corporal James W. B. Mannion, Company "M," 12th U. S. Infantry, Angeles, Luzon, P. I., via Manila.

For Sale: Old Alaskan Indian curios and relics. L. L. Bales, Haines, Alaska.

"You and young Chubleigh don't speak to each other any more, Ethel. What is the matter?"

"Nothing, only he told me one day when we were at the park that I had a swanlike neck, and I told him he had a swanlike walk,"—Chicago Tribune.

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Who can doubt that there is a cure for drunkenness when we have such an eloquent and emphatic statement from Mrs. Katie Lynch, 329 Ellis St., San Francisco, Cal., she says:—My husband was a hard drinker.



MRS. KATIE LYNCH

There never was a doubt in my mind but what liquor had so worked upon his nerves as to actually control his appetite. Like most men who drink he was kind and generous when sober, but the rum demon usually had the better of him and his wife had to suffer. One day I concluded to try a remedy called Golden Specific, which it was said would cure the liquor habit secretly. So I mixed some of it with Mr. Lynch's food for a few days and put a little in his coffee. I could scarcely conceal my agitation and fear lest he should suspicion me, for he had suddenly taken a dislike to liquor, said he despised the stuff, and was the most remarkably changed man you ever saw. I kept bravely at it, determined to not waver in any attempt to cure him, and I soon found out that my mission was a complete success and that Golden Specific had wrought almost a miracle for me. I want other women to profit by my example and am glad to learn that Dr. Haines who discovered Golden Specific will generously send a free trial package to every woman who writes for it.

Send your name and address to Dr. J. W. Haines, 1304 Glenn Bldg., Cincinnati, Ohio, and if you wish you are at liberty to refer to me as having told you about this marvelous remedy.

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For Sale: Double barrel Forehand hammerless Brush gun, grade 1, 16 gauge, 26 inch Damascus barrels, 13½ inch stock, 3 inches drop, weight 6¼ pounds. Almost new and a fine shooter. 16 gauge shell vest and Tomlinson cleaner goes with it. Sell for \$30, net. Terms C. O. D. with privilege of examination. Ernest Russell, Box 115, Worcester, Mass.

For Sale: Remington 12 gauge Hammerless Shot gun, with Winters' pad, cost \$47 00; Long Focus Premo Camera, 5x7, with 5 holders and color screen, cost \$52.00; 5x7 Victor R. 3 lens and shutter, cost \$27.00. Will sell reasonably. Make offers. All in good order. D. B. Bartlett, Durham, N. H.

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I see T. S. Ford, of Des Moines, goes wild on spring shooting, in August RECREATION. I lived in Iowa 30 years. Game was everywhere. I have seen a wagon-box nearly full of chickens brought in from a day's hunt by 2 or 3 men. Ducks were numberless. The time for killing was any time when you could find game. We all killed all we could, and no wonder birds became scarce. I went hunting here in the spring, 12 years ago. I put out some old wooden decoys, and the blackheads just fell over one another to get to them. We picked up 38 ducks, and poor, scrawny things we found them; not a bird weighed one-half what it should. I quit right there and have done no spring shooting since. I talked to all the boys, and I want to tell you it doesn't take a law to keep the local hunters here from killing ducks in the spring. We have a lake $1\frac{1}{4}$ miles from town. It was estimated there were 10,000 ducks on it at a time this spring, and I don't believe there was a gun fired at them. If Iowa hunters will let their ducks alone in the spring the birds will stay and hatch, and there will be good shooting up to October 1st. Ford says 6 killed in the fall is as bad as 6 killed in the spring. Of course in either case the ducks are dead; but if they were made for the use of man all should have a fair chance at them. A law that says from September 1st to January 1st would give each man a chance.

O. J. Morrison, Pelican Rapids, Minn,

THE SALE OF QUAILS FORBIDDEN IN SHELBY CO., TENN.

Knowing you are opposed to the sale of game everywhere, I send you the following from our local paper, the Memphis Commercial Appeal:

Two bird laws with particular reference to Shelby county were passed by the recent legislature, and they are to some extent apparently in conflict. The first law limits quail shooting to the period between November 1 and February 1 of each and every year. The second positively declares that no more quails shall be killed in Shelby county until November 15, 1900.

In the first act the men who deal in this particular kind of bird have some interest. The law declares that it shall be a misdemeanor for any person to sell quails in this county between November 1 and February 1 of each and every year, and this is the only period during which men are allowed under the law to hunt quails in the county. This will close down the dealing in this particular bird so far as the Memphis market is concerned.

The second act is a short one and is specific enough in its provisions. The first section is as follows:

"That hereafter, until the 15th of November, 1900, it shall be a misdemeanor for any person or persons to kill or trap any quail or quails in Shelby county, of this State."

The penalty is a fine of not less than \$10 nor more than \$50, and imprisonment in the county jail for a term of not less than 3 months nor more than 6 months. The effect of this law is to silence the guns, so far as quail shooting is concerned, in Shelby county until after November 15, 1900. This will be a year from the coming November and will give the quails two brooding seasons, during which time they can fill up the gaps in their decimated ranks. This last law is of short duration. It will pass out of existence after November 15, 1900, and the first law passed will become operative with reference to the bird shooting season. By passing the second act, providing that there should be no more quail shooting in Shelby county until November 15, 1900, the legislature simply modified the first act, and in finding out what the bird law is, the hunter will have to take the two acts together. This would probably be the construction of the courts.

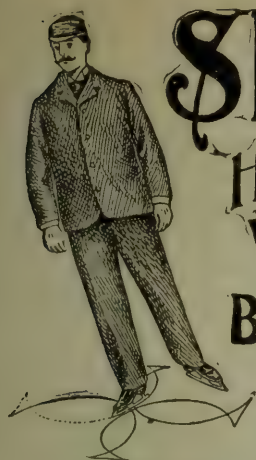
Ten other laws were passed by the recent Legislature on the same subject, but applying to different sections of the State. The smaller counties are grouped, sometimes in Congressional districts, sometimes in florial districts; but the law throughout the State is about uniform.

These laws are along the right lines, especially in regard to the sale of game. Memphis is one of the greatest game markets in the South, being in easy reach of Mississippi and Arkansas, the best quail States in the Union. This law will be beneficial to sportsmen, as the market hunters will not hunt if they cannot sell.

A. B. Wingfield, Memphis, Tenn.

For Sale: 12 gauge, double barrel hammer breechloading gun, made by E. M. Reilly, London; plain grip, lever under guard, cost \$150. Also by same maker, one heavy barrel hammer breechloading gun; lever under guard, pistol grip with cheek piece. One pair 10 gauge shot barrels for same. One extra pair heavy 12 gauge barrels for same, rifled, for shooting ball cartridges. Both guns in heavy sole leather trunk, made to fit same. Cost of entire outfit, \$400. Will sell separately or entire outfit for best cash offer.

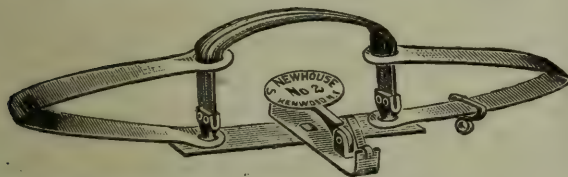
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According to Elliot, there are 2 species of turkeys in America, the *Meleagris sylvestris* of Eastern America and the *Meleagris gallopavo* of the Southwestern United States and Mexico. Both are strictly forest birds. The Mexican turkey was carried to Europe via Cuba and there domesticated. The people of Western Europe erroneously thought it originated in Turkey, hence its name. It was then introduced into America, and is now crossed with our Northern wild turkey. On large estates it soon becomes quite wild and forms an excellent game bird. A fine flock of semi-wild turkeys may be seen on Vanderbilt's estate at Biltmore.

The game laws are grossly and openly violated here, and a game warden in this city, who draws a fat salary for loafing, has been known to head a procession of law-breakers.

John L. Von Blon, Los Angeles, Cal.

Evening grosbeak with us up to May 16. Bluebirds scarce; dislike to share company with barbarous sparrows.

H. W. Howling, Minneapolis, Minn.

I am glad you keep up your war on the game destroyers. They have had undisputed sway long enough. Give it to them.
Wm. T. Cox, Lowry, Minn.

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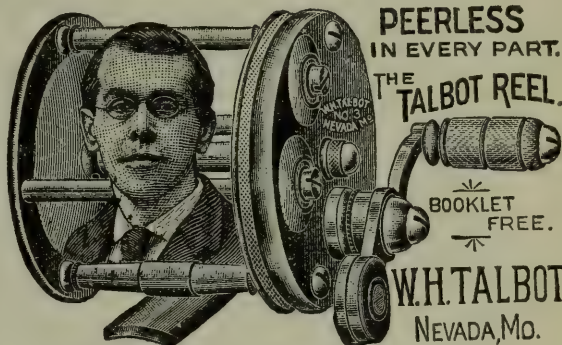
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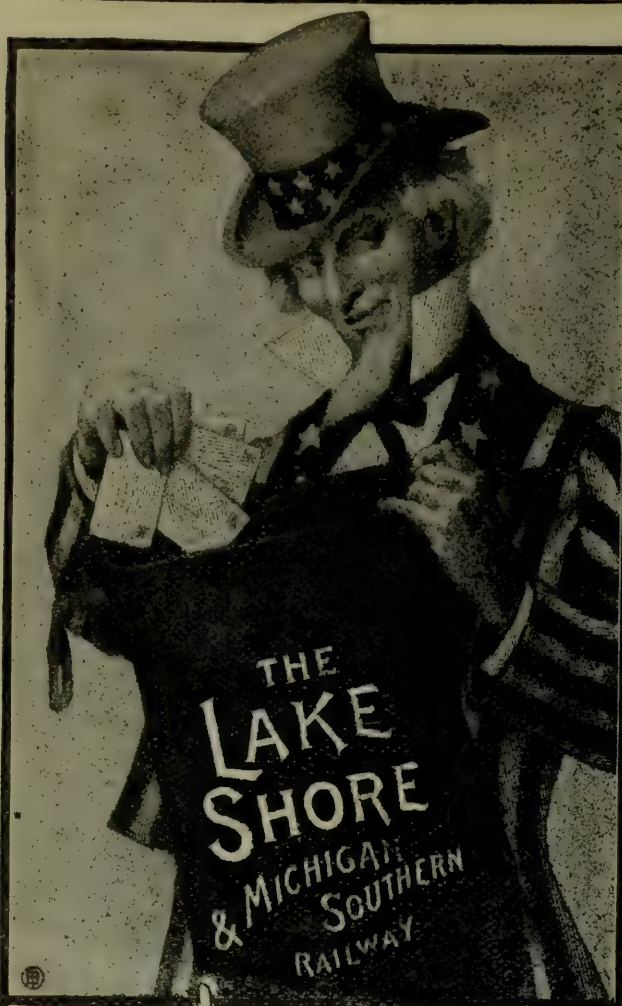
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The route takes its name from Mt. Shasta in Northern California. This white, snow capped peak, at the foot of which the railway winds, is 14,350 feet high. The mountain is in plain view, for several hours, from the train, and its distance from the track varies from twelve to seventy-five miles.

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The crossing of the Siskiyou range furnishes the **par excellence** of railway mountain scenery, and observation cars are provided there free of charge. Then in succession come Mts. Jefferson, Hood—a beautiful mountain—St. Helens, Rainier—14,532 feet high—and Adams, all former active volcanoes and now covered with glaciers.

From Portland a steamboat side trip up the noble Columbia river to the Cascades and Dalles enables the tourist to see a river, palisades, waterfalls and mountains far surpassing anything the Hudson can show.

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Then follow the Cascade range and the Rockies, and a stop can be made at Yellowstone Park.

This line traverses the finest scenic region of the United States—don't forget it, and see that your return tickets home from California read around this way.

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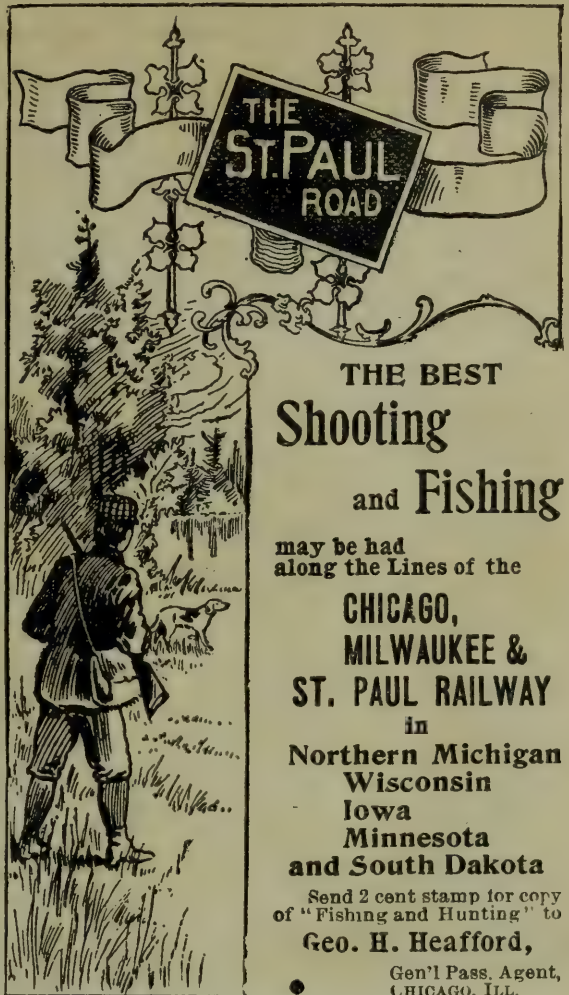
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The map in the "Round the World"
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AND NEW PATENT PUTTEE

*For Golfing, Shooting, Hunting,
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The **Puttee** entirely supersedes leggings and golf stockings, and can be worn over trousers.

The **New Puttee** is so designed as to wind on spirally from ankle to knee, and to fit closely to the leg with even pressure without any turns or twists. **No buttons.**

The **Spat-Puttee** is made to fit any size boot or shoe.

No measurements required.
All wool and water-proofed.
Easily dried or cleansed.

Patent Puttees, \$3 per pair
(Without Spats)

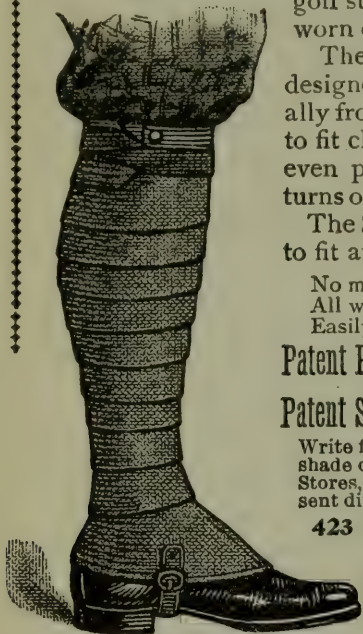
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When not kept by
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promptly relieve and cure all forms of indigestion. They have done it in thousands of cases and will do it in yours. The reason is simple. They digest the food whether the stomach works or not and that's the whole secret. For sale by all druggists, 50 cents a package. Address,

F. A. STUART CO., Marshall, Mich.
for free book on stomach troubles.

Near the village of Jewett City, Conn., where I live, there is a large reservoir, known as Pachaug pond, well stocked with black bass. When the pond is fairly well filled the fish have plenty to feed on, and at such times a good string can be taken only by skillful angling. This reservoir, however, supplies water for 2 large cotton mills. In a dry season it runs low, a large number of fish are crowded into small space, the feed becomes scarce, and the usually wary bass will almost jump into your basket for the sake of a worm. Instead of protecting the fish at a time like this, many fishermen are visiting the pond and carrying away the fish in meal sacks. Several of our representative citizens were seen in a local grocery store proudly exhibiting over 50 pounds of black bass taken from Pachaug pond. They had the reporter of a local paper present that he might duly chronicle their hoggishness. It is to be hoped a strong feeling may be created against those guilty of such wanton destruction.

Arthur M. Brown, Jewett City, Conn.

Trout fishing in North Carolina last season was fairly good. I made catches of 35, 29, 32, 7 and 66. Deer and turkey shooting were also good.

S. A. D., Sapphire, N. C.

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MANUFACTURER OF
The Tomlinson Cleaner
FOR SHOT GUNS
106 CORTLAND AVENUE

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Dear Sir:-

Enclosed find draft for \$30 to apply on account.

RECREATION has sold 3 times as many Tomlinson cleaners,
direct by mail, as all the other mediums combined which I have been
using.

Yours truly,

I. J. Tomlinson.

Dealers know
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GUN CABINET

The following firms sell
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Cabinets. If your dealer
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THE SHAKESPEARE

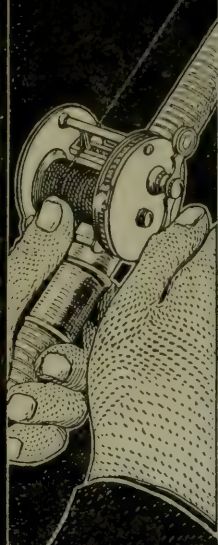
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FINE HAND MADE,
REEL

Having advantages and merits peculiarly its own, chief of which is the LEVEL WINDING device, which spreads the line evenly along the spool.

Shall I send you circular giving more points about it?

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THE AUTOMATIC-COMBINATION FISHING REEL.

Winds the line automatically by the action of a spring controlled by the little finger of the hand holding the rod.

CHANGED INSTANTLY
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to Free-Running.

The
Little
Finger
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Fresh Fish Fried Friday

should be caught the same day, and on a BRISTOL Steel Fishing Rod. Why? In the first place, you are more certain to catch a fish on a "Bristol" (if you wait until the last moment), for the spring and strength of a "Bristol" helps amazingly in making a sure thing of it. Of course we are prejudiced in favor of our own make of rods—but we can't help it. Every angler who has ever used one of our "Bristol Steel Fishing Rods" insists that it is the finest fishing tool ever made. Why shouldn't we be prejudiced? Have you seen our new Catalogue? No! Then send for it—it's free.

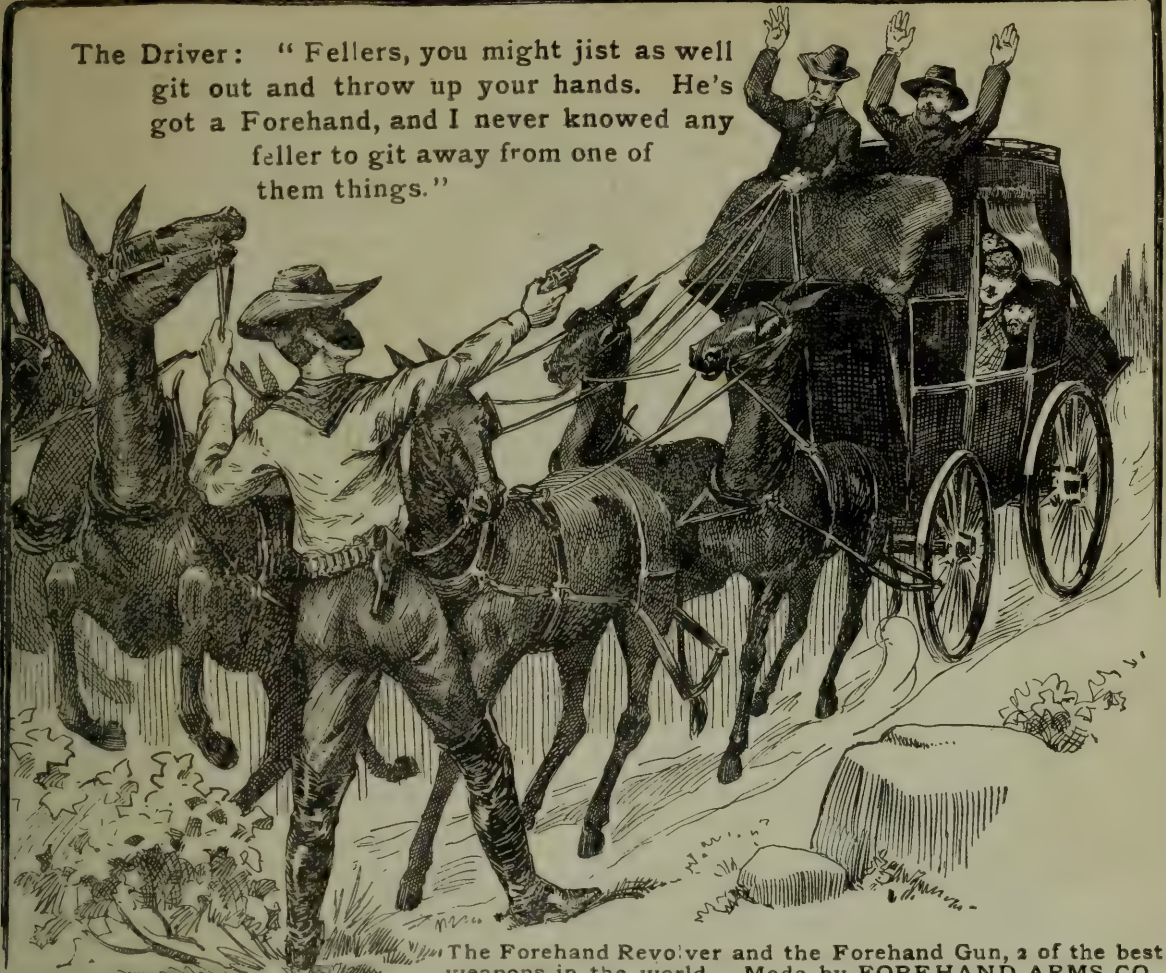
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Ask for Cat. "R."

Mention RECREATION.

The Driver: "Fellers, you might jist as well git out and throw up your hands. He's got a Forehand, and I never knowed any feller to git away from one of them things."



The Forehand Revolver and the Forehand Gun, 2 of the best weapons in the world. Made by FOREHAND ARMS CO., Worcester, Mass Write for Illustrated Catalogue.

Mention RECREATION.

MAUD AND THE JUDGE AGAIN.

Maud Muller jumped on her time-worn bike

For an evening hit at the dusty pike.

An old drop frame of a 'way down gear
With a rattle the sleeping dead could hear!

The judge came pounding along behind,
Out airing his great judicial mind.

He noted the figure neat and trim
And graceful motion of hidden limb.

And he said to himself in his grave delight:
"Whatsmatter with Maudie? She's all right!"

He drew beside her and asked her flat
Why she rode such an old ice cart as that?

And she said saleslady could ill support
Such wheel as the judge of the district court.

He told her she could on a chainless ride,
With a diamond frame, if she'd be his bride.

Or if she would bust up his solo life
They would tandem together as man and wife.

Maud bit at the bait like a hungry trout,

And the old judge smiled as he yanked her out!

They ride on a tandem now, of course,
But Maud has to work like a treadmill horse!

For the judge has learned how to sit and shirk
And let his darling do all the work.

He weighs two hundred and fifty-one,
But the poor girl thinks it an even ton.

And she often says with a pain-rent heart:
"I wish I was back on my old ice cart!"

"Of all true words that I ever spake,
The truest are these: 'He's a bloomin' fake!'"

—Denver Sunday Post.

A subscriber writes this on his renewal notice and returns it to this office:

You can keep it; you know damn little about hunting, and I don't want it—see?

F. A. Taylor, Jamestown, N. D.

When you hear an animal squeal like that you can tell to what species he belongs with your eyes shut.

ITHACA

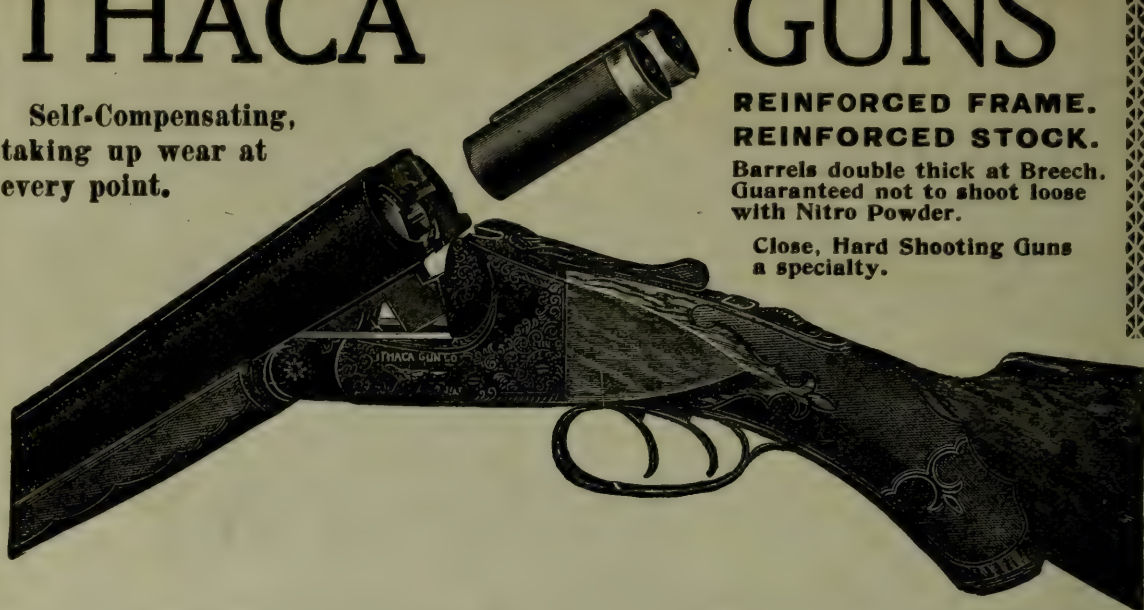
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taking up wear at
every point.

**REINFORCED FRAME.
REINFORCED STOCK.**

Barrels double thick at Breech.
Guaranteed not to shoot loose
with Nitro Powder.

Close, Hard Shooting Guns
a specialty.



Prices reduced, and every Gun warranted in the most positive terms. Send for Circular,
and ask for special prices.

We guarantee a No. 3 or No. 4 to be worth \$25.00 more than any other make at same
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ARE MORE

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SINGLE
GUNS

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ANY OTHER
MAKE



They have merit, are well made, and shoot well.
Our single shot gun, with AUTOMATIC EJECTOR, is the
most popular gun of this kind on the market.

*Send for New Catalogue of Single Guns and Rifles

The W. H. DAVENPORT FIRE ARMS CO., Norwich, Conn.

We have 9 Hammerless Guns made by Messrs. J. P. Clabrough & Bros., which we will close out at the following

NET CASH PRICES

3 Guns	Fine Damascus barrels, nicely engraved locks, 12 bore, 30 inch, 7 to 7¼ lbs., made to sell at \$60.00 <i>net</i> .	\$45.00
3 Guns	Fluid steel barrels, automatic cartridge ejectors, plain finish, 12 bore, 30 inch, 6¾ lbs., made to sell at \$80.00 <i>net</i> .	\$60.00
3 Guns	Finest Damascus barrels, finely engraved, automatic cartridge ejectors, 12 bore, 30 inch, 7 to 7¼ lbs., made to sell at \$100.00 <i>net</i> .	\$75.00

We are closing out these guns at less than cost, as the high duty on them does not warrant us importing them any more.

Schoverling, Daly & Gales

302-304 Broadway

New York

TARGET CHAMPIONSHIP OF AMERICA

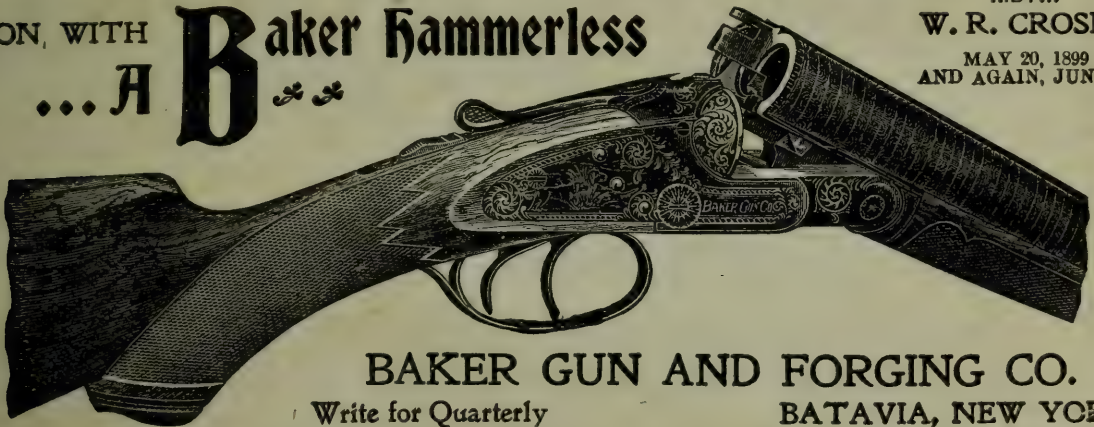
WON, WITH

... **A** **B**aker Hammerless

...BY...

W. R. CROSBY

MAY 20, 1899
AND AGAIN, JUNE



BAKER GUN AND FORGING CO.

Write for Quarterly

BATAVIA, NEW YORK

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A new system of sighting shot-guns, so effective that the novice finds but little difficulty in killing the most rapid birds. No sportsman's outfit is complete without a

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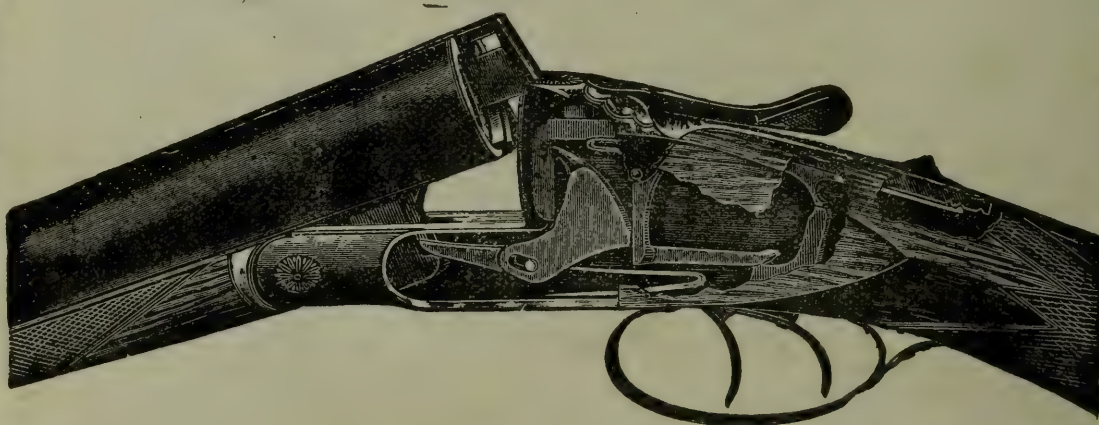
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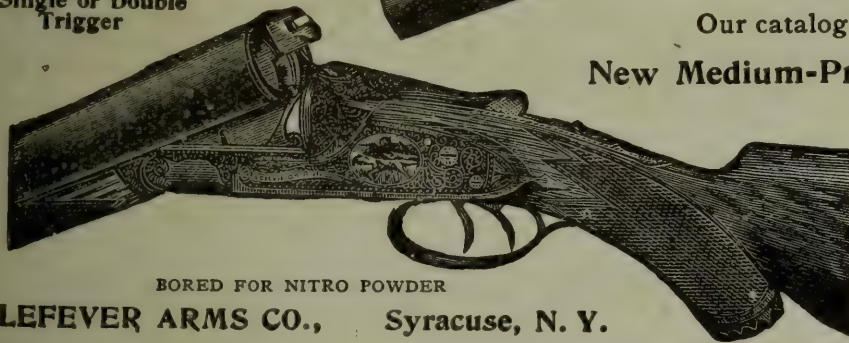
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FEEL BARRELS, double reinforced, refined steel breech. Barrel fits squarely in the frame and is heavily bolted, making it impossible to become shaky. Barrels are highly finished and beautifully tapered. Top brake, patent extractor, rebounding lock, case hardened lock frame, fancy walnut stock, pistol grip. 12-gauge. Weight, 6½ to 7 pounds.

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WHY DID Du Pont Smokeless

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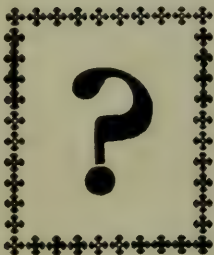
WIN THE HIGHEST AVERAGE

AT ALL THESE TOURNAMENTS?

The Budd-Gilbert Tournament, August 23, 24 and 25, 1899.
Portland (Me.) Interstate Tournament, August 9 and 10, 1899.
Providence (R. I.) Interstate Tournament, July 19 and 20, 1899.
Denver (Colo.) Tournament, July 7-9, 1899.
West Virginia Sportsmen's Association Tournament, June 20-22, 1890.

Chamberlain Cartridge Co.'s Tournament, June 13-16, 1899.
Sidell Gun Club Tournament, June 14 and 15, 1899.
Bellows Falls Interstate Tournament, June 14 and 15, 1899.
Sioux City Tournament, June 6-9, 1899.
New York State Shoot, June 5-10, 1899.
Iowa State Shoot, May 22-26, 1899.
Illinois State Shoot, May 9-13, 1899.

DuPont Smokeless also won more money at the Grand American Handicap of 1899 than all the other powders put together.



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RODUCING
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ATRONAGE.



No black powder behind a bullet! On account of its wonderful action in Rifles and Pistols, King's Semi-Smokeless has been adopted in all metallic cartridges (excepting smokeless) without advance in price.

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Eastern Branch, 80 Chambers Street, New York.
A. L. Peters, Agt., St. Paul, Minn.; Hibbard, Spencer, Bartlett & Co., Chicago; and best trade everywhere.

I herewith send a clipping from the Ukiah City Press, published at Ukiah, Mendocino County, Cal.:

WILL BE ARRESTED.

A warrant was issued Sunday last for the arrest of Robert Edgren, the well known artist of the San Francisco Examiner. Game Warden Ornbaum charges him with having killed a grouse Saturday last on the Boonville road. The grouse was the mother of a fine flock of young ones. The little chicks of course perished after the wanton murder of their mother. The artist was informed by a friend that he had made himself subject to arrest, and he took his way South without waiting for the papers to be served. The grouse in this county, and in fact all over the State, are rapidly becoming extinct, owing to the rapacity of hunters. In a few years they will have altogether disappeared. It is the same with other small game, as well as with deer. The severest penalties should be inflicted on violators of the law.

This spring a young fellow here ran across a band of 5 bucks. He killed 4 and lamented because the other got away. I overheard a stranger who is camping here complaining that he and his partner killed only 10 deer on their hunt the other day. He said they should have killed 17. I suppose that was the number they saw, and, swine like, they wanted all.

Game Warden Ornbaum, of this district, is doing good work. He has had several persons fined for killing deer out of season, and one for killing quails.

A. E., Philo, Cal.

L. & R. WATERPROOF GUN-POWDER

This is a dense nitro-powder which is guaranteed to keep in any climate without losing its strength.

It is clean, quick and strong, giving a high velocity with a very close and regular pattern.

Considering its many superior qualities it is cheaper than any other powder on the market at the same price, or that costs less.

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I have read RECREATION since June '98 and like it very much; but one thing I cannot understand. I hear a constant growling about hounds. Now if the city sportsmen would quit their growling about hounds and see that the laws were enforced they would have more grouse to shoot. I detest dogging grouse with setters and pointers just as much as they do hounding deer. I do not see much difference.

Chas. Acker, Aaronsburg, Pa.

Ole Sieverson and Adolph Carlson, of Mason, Wis., were hunting deer in that State in September last—a month before the opening of the legal season. The men became separated and Carlson seeing the brush moving a short distance from him supposed the disturbance was caused by deer and fired into the thicket. He bagged his partner, who died a few hours after. It is a great pity Sieverson did not return the fire and finish up his murderer.

He gazed upon her fair young face,
Her starry eyes, her form of grace,
And leaned to listen when she spoke—
These were her words: "That ain't no joke."—Chicago Record.

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March 24, 1899.

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G. O. Shield, Esq.,

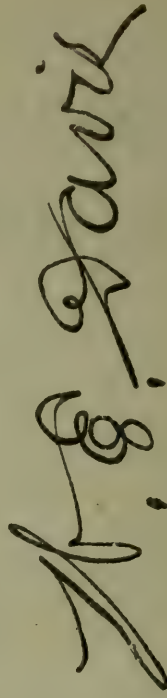
Editor RECREATION

19 West 24th St., New York, N.Y.

Dear Sir:-

You will probably be pleased to know that I have found your magazine one of the best advertising mediums in America. The short notice with reference to our 1899 Calendar, which you inserted in the February issue, has brought in nearly 700 requests, and every morning we still receive letters mentioning RECREATION and asking for a Calendar. I regard the results as almost phenomenal.

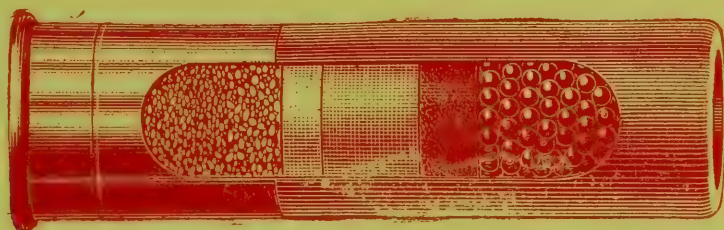
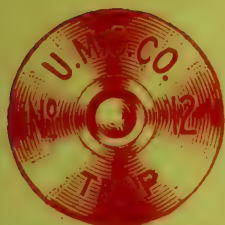
Yours truly,



G. P. & T. A.

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Were used by R. L. PIERCE, of Wytheville, Va., in winning the BELLE MEADE HANDICAP at Nashville, Tenn., October 28th, 1899, with a record of "SIXTY STRAIGHT" 🍀🍀🍀



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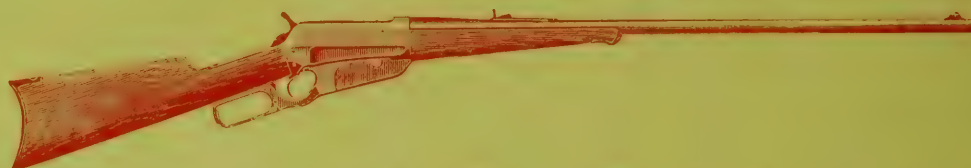
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23 WEST 24TH ST. NEW YORK

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OFFICIAL ORGAN OF THE LEAGUE OF AMERICAN SPORTSMEN

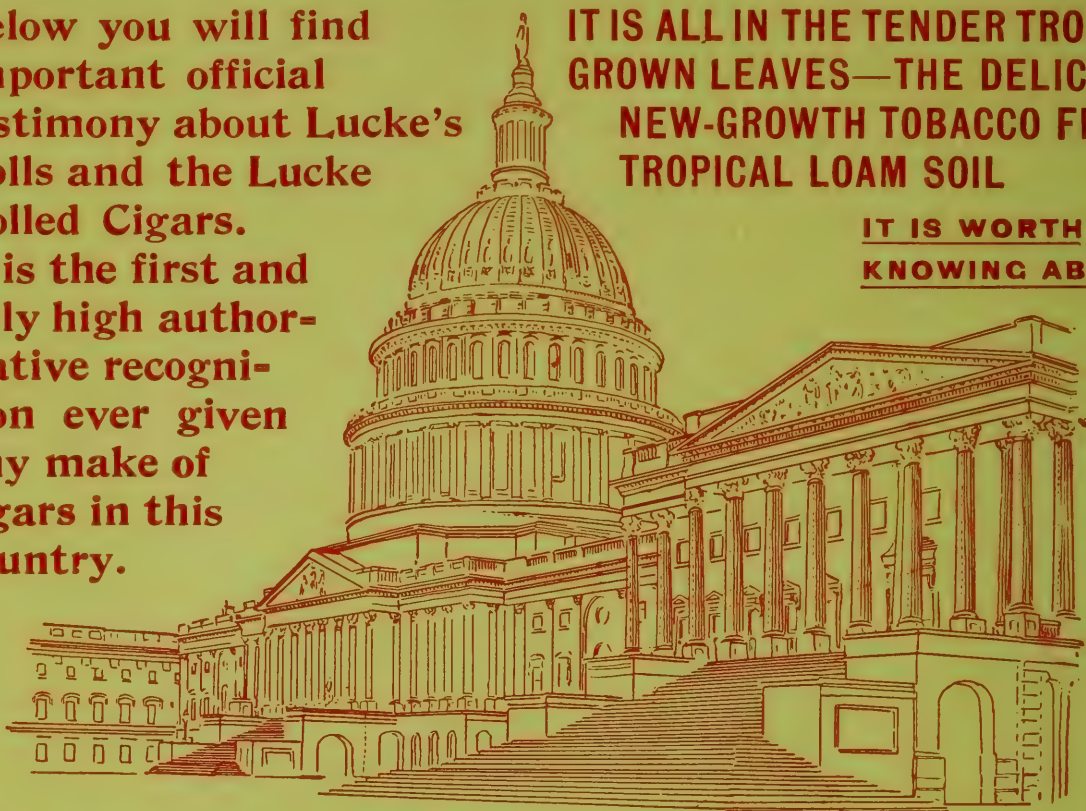
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IT IS WORTH
KNOWING ABOUT



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ON THE HYGIENIC VALUE OF CIGARS

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Inasmuch as we are looked to for unbiased reports on such matters, solely for the public welfare, as an instituted and dependable authority on matters of health for the benefit of the American public—and inasmuch as we have received many inquiries on this subject—and have instituted an examination into this matter and have investigated a great number of the various brands of cigars offered the public, we have found that the “Lucke Rolls” and “Lucke’s Rolled Cigars” made by J. H. Lucke & Co., of Cincinnati, Ohio, were perfect and came up to every exacting qualification. They are made of finest tropical tobacco, hygienically handled from the very start and manufactured according to the best methods known to science. Extreme cleanliness is required in every handling and they reach the consumer with the absolute guarantee that they combine the very best qualities possible to be contained in a cigar.

Knowing the wholesomeness of this product, we advise the use of these goods by all who wish a healthful smoke. Upon the highly favorable report of our Hygienic Experts and Medical Staff we cordially extend to the Lucke Cigars and Rolls our editorial and official endorsement. (SIGNED) THE UNITED STATES HEALTH REPORTS, Washington, D. C., Jan. 2nd, 1900.

By A. N. TALLEY, M. D.

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RECREATION

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G. O. SHIELDS (COQUINA),
Editor and Manager.

23 WEST 24TH STREET,
NEW YORK.

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fine : Guns

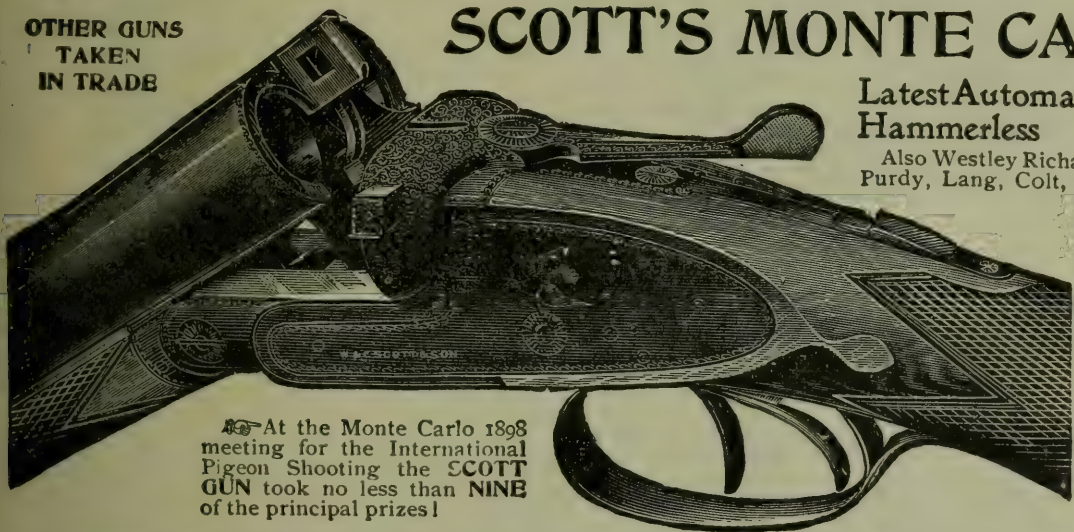
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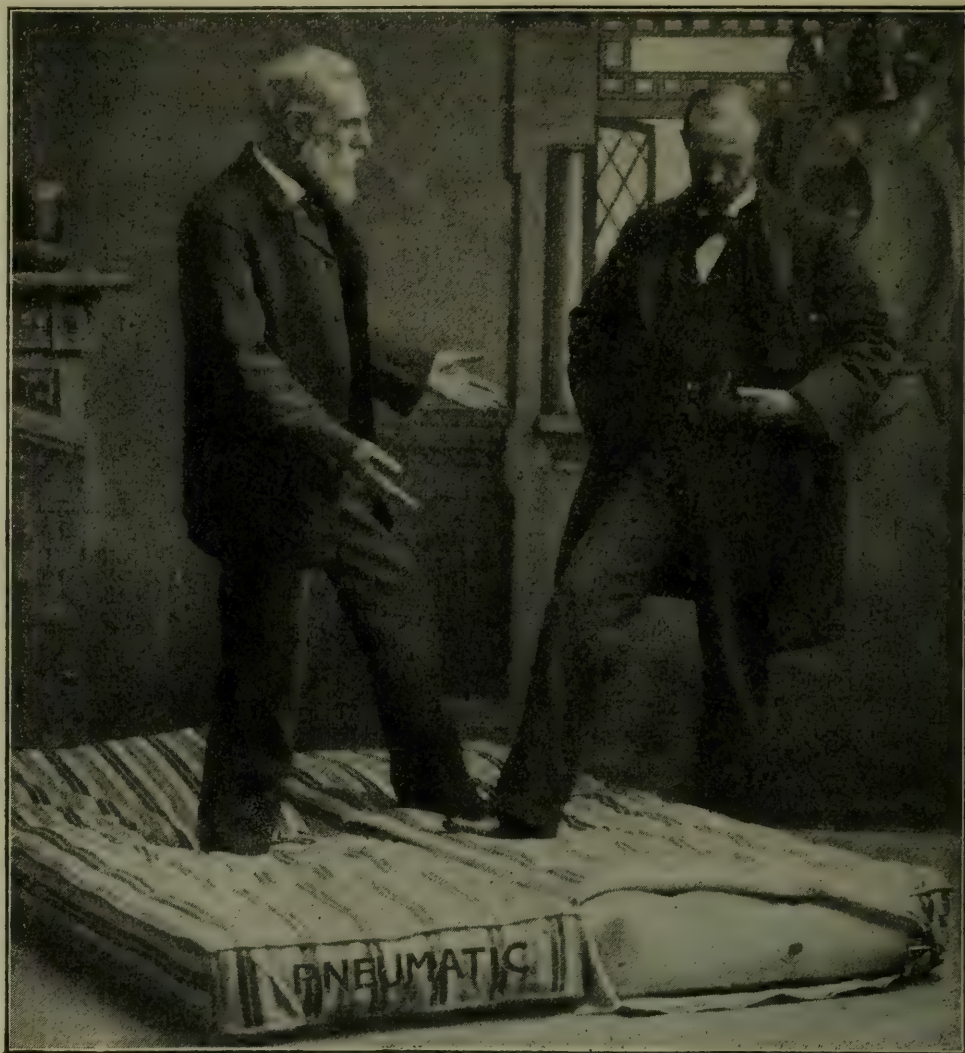
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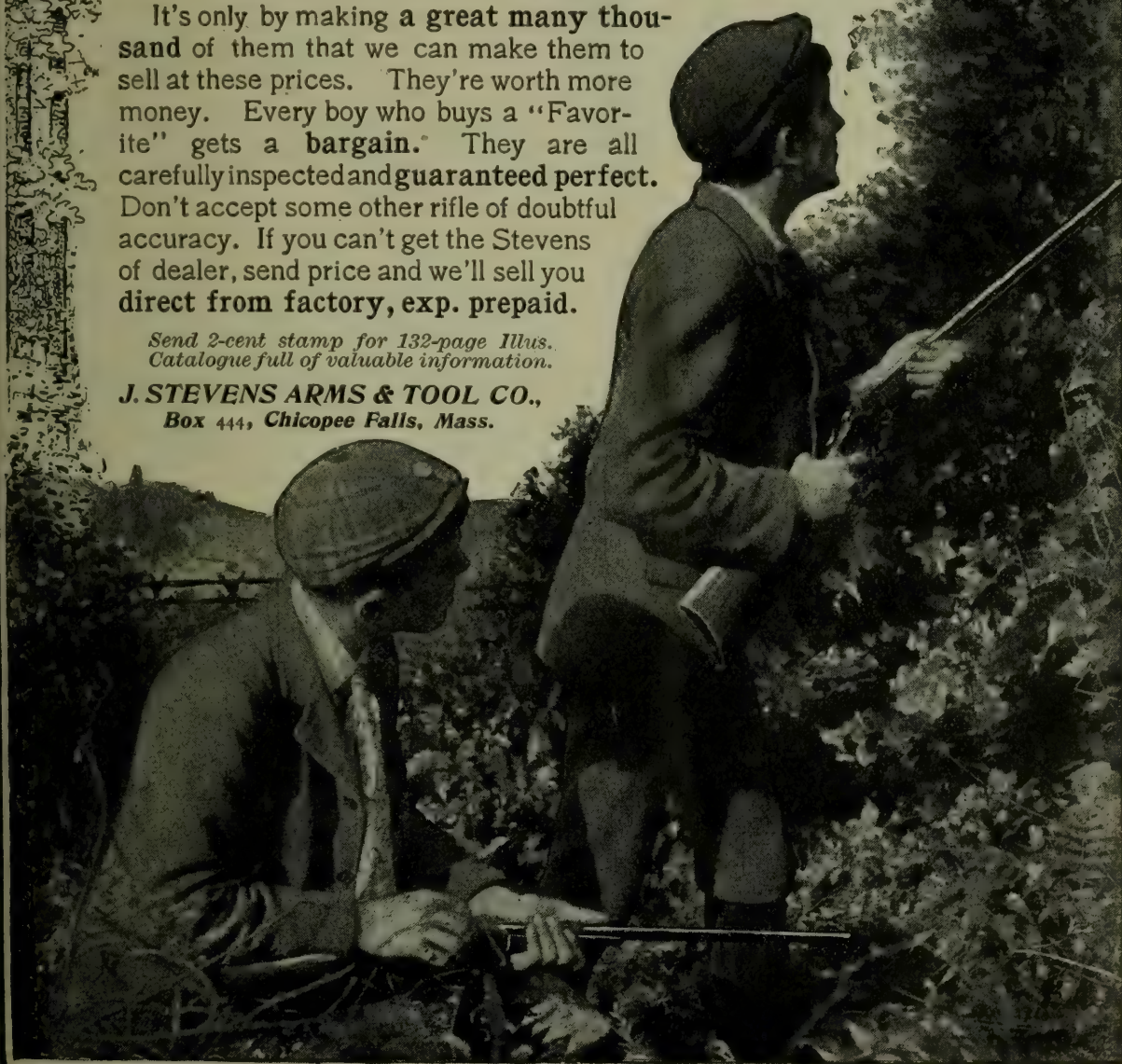
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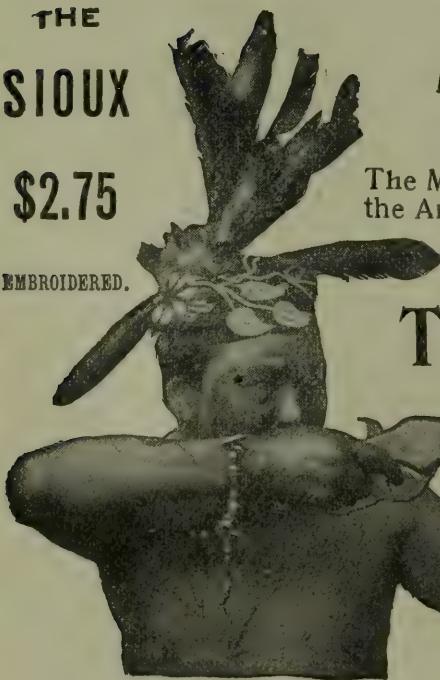
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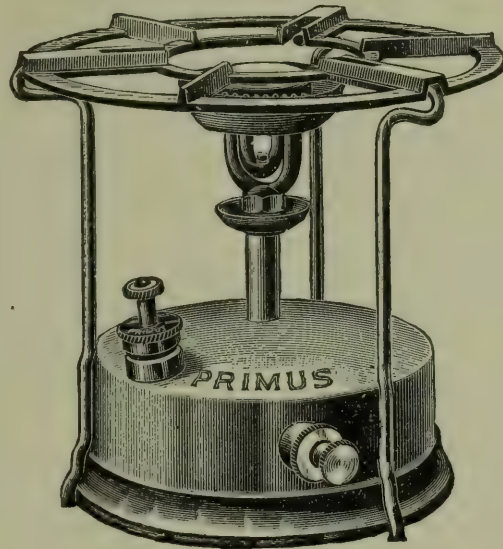
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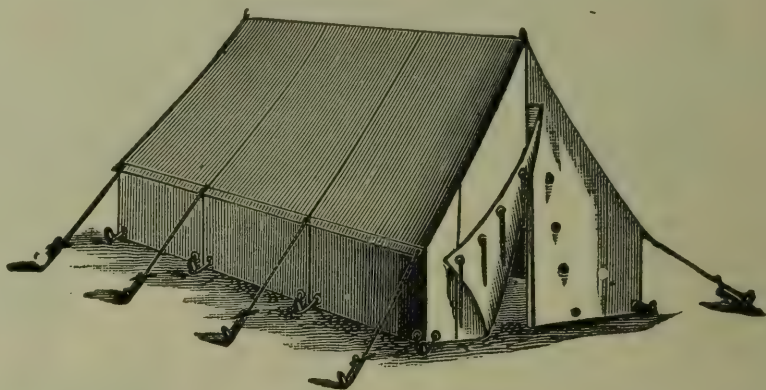
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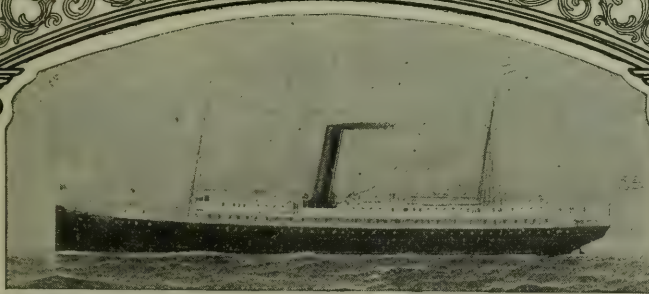
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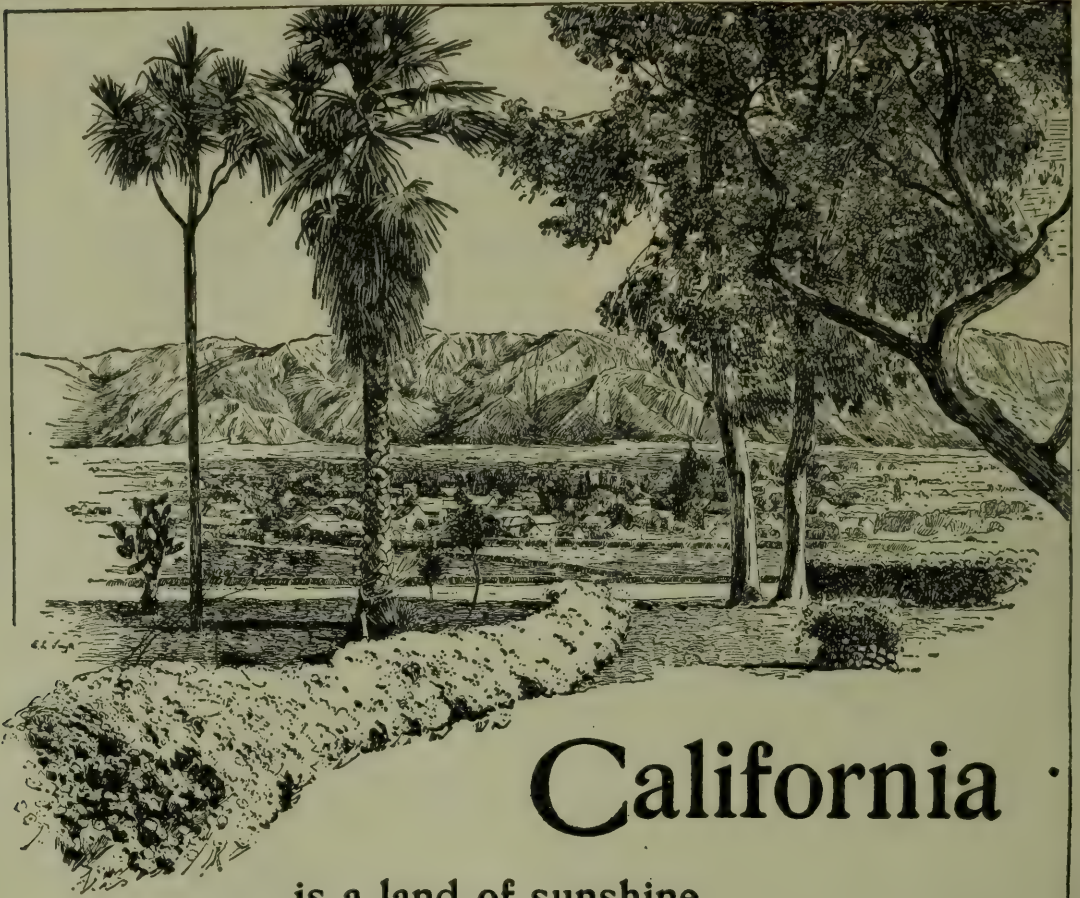
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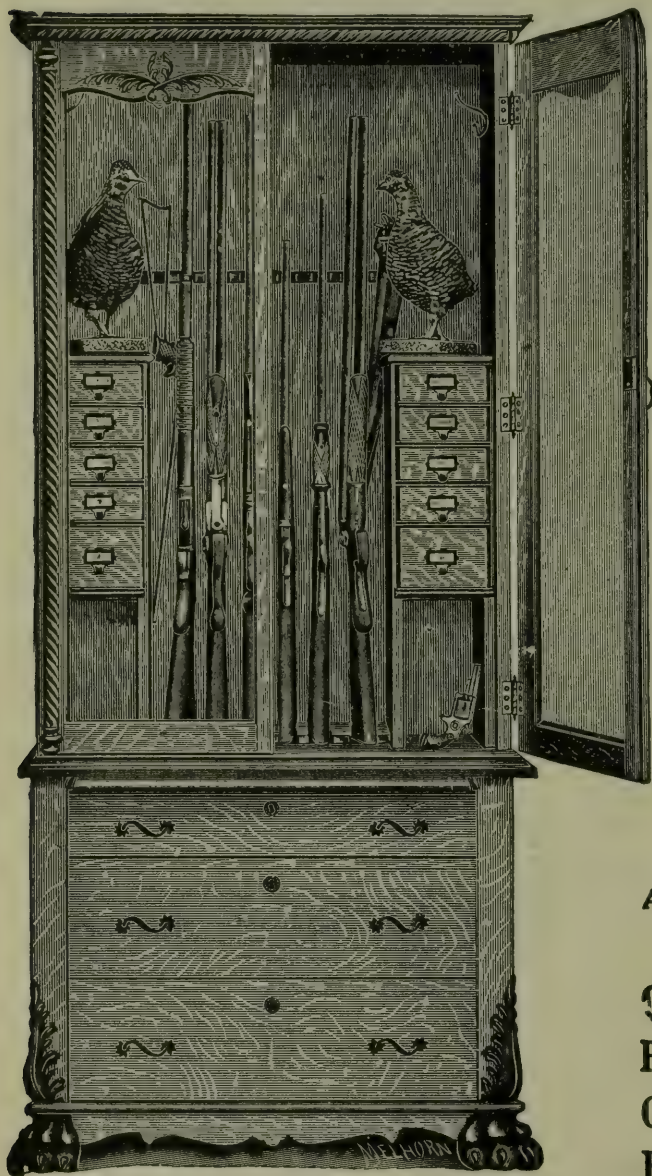
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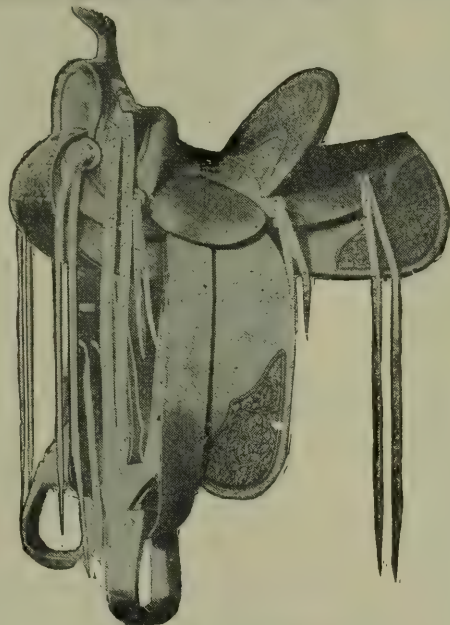
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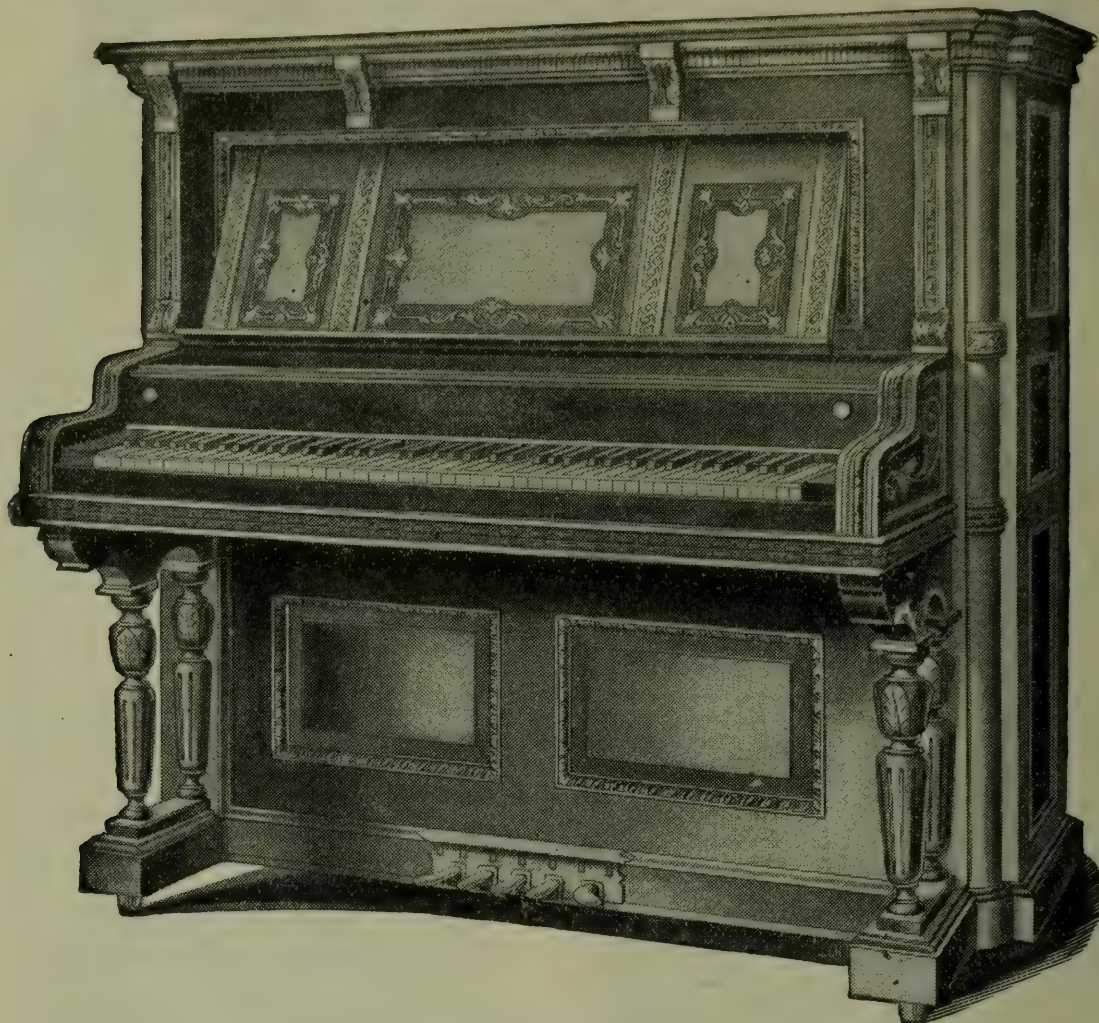
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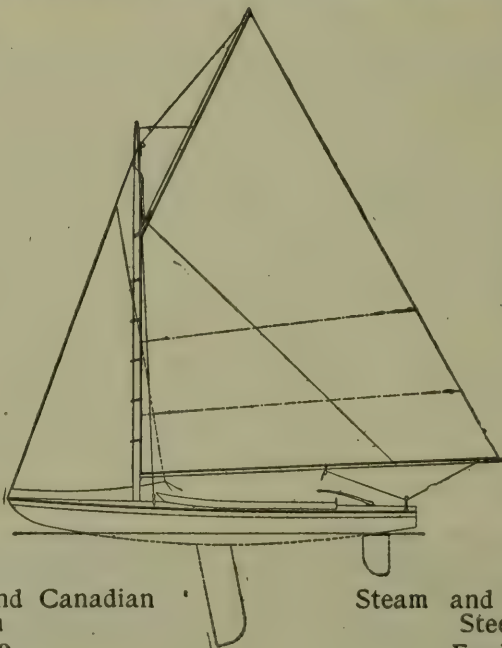
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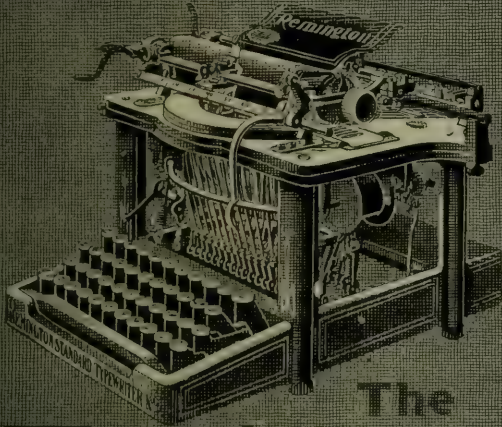
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RECREATION

Volume XII.

FEBRUARY, 1900.

Number 2

G. O. SHIELDS (COQUINA), Editor and Manager.

A TRAGEDY IN THE MAINE WOODS.

WM. E. COFFIN.

The late Jock Darling was a picturesque feature of the Maine woods; in his way a type. As he accompanied me on 3 hunting trips I had an opportunity to become well acquainted with him and his peculiarities. At his home he was a substantial, law-abiding citizen, who had accumulated some property, was respected by his neighbors and had raised a family of children considerably above the average in intellect and character. In the woods he possessed a perfect knowledge of game and its habits, and a natural gift for still hunting. I have never seen anyone, either Indian or white man, who could equal him in handling a canoe.

It is a fact well known among sportmen that no man can become a really fine marksman who does not have piercing gray eyes, and Darling's case is another proof of it. He had the eyes of a hawk and was a famous marksman. Ordinarily taciturn, he could, on occasion, talk most interestingly of the woods, of wild animals and their habits, and of his own experiences.

Darling's one fault as a guide was an indisposition to what he deemed unnecessary exertion or change of location. This was doubtless due to his age. In my own experience it has been necessary to cover a great deal of territory to locate a proper hunting ground in a limited time. My restlessness, as he doubtless called it, probably tried Darling's soul. Cer-

tainly he resisted every proposition to move camp, with all the quiet stubbornness of his nature, and it was almost impossible to get him out of a canoe. He hated foot work.

His life was greatly clouded, and probably shortened, by a continual contest with the game wardens. He refused to recognize the game laws, persisting in killing game whenever and wherever he pleased, and at one time ran what was called a "meat route," peddling unlawfully killed venison from his wagon at such low prices that the legitimate butcher of that section was driven from the trade. So great was his reputation for coolness and relentless pursuit of an enemy, and so strong his hold on the community in which he lived, that for years the game wardens dared not arrest him. Had Darling's energy in evading and brow-beating the game wardens been turned in more legitimate directions he would have made his mark in almost any community.

The development of the sportsman's instinct in me must be a case of "throw back," for my ancestors, as far as their habits can be traced, were office men or farmers. My father would never permit me to have a gun. Entering business and marrying early, I was 30 years old before I had fired a rifle at a living object. But the instinct was there, and in time made itself felt.

My first experience was after deer in Maine, and, having had 2 rather

successful trips, I became eager to kill a moose. Darling selected the upper waters of the West branch of the Penobscot river. We went in via Moosehead lake, taking the regular steamer to the Mount Kineo House and a tug boat from there to the Frenchman's at the Northwest Carry, where we spent the night. Our canoe was next morning loaded on a wagon, and hauled 4 miles over the old tote road to a large, swampy logan. This was drained by a small creek, which emptied into the West branch of the Penobscot river, a mile away. It was the line of supply for several logging camps, and a rough corduroy across the swamp enabled the wagons to reach water deep enough to float a boat.

The canvas covered canoe, which Darling had brought from his home, was soon launched and we were on our way down the narrow creek, under the interlaced branches of the alders, for a 20-mile paddle up the Penobscot river. In 3 places the rapids were rough and rocky and the narrow escape of an Indian, whose canoe was nearly wrecked in the rough water, heightened my appreciation of Darling's skill with paddle and pole. On our way we passed 2 hunters with their guides, who told us they were headed for the same country, and manifested much chagrin at seeing us go by.

Late in the afternoon we sighted the light of a lumber camp at a fork in the river below the Canada falls. It had rained all day. I was thoroughly tired and wet to the skin, so a shelter was welcome. It was a typical lumber camp; one large room, with a loft fitted with bunks for 40 men; the ceiling laced with ropes, hung with wet clothing and stockings. The men, mending clothing, playing cards and chatting, were a picturesque group of Indians, half-breeds, French Canadians, and Americans, with a sprinkling of Irish and

German. The air of the sleeping room was thick with the odor of poor tobacco and wet clothing.

The kitchen, in a lean-to, was more attractive, for it was clean. The cook of a lumber camp rules with an iron hand. He is responsible for the care of the camp, and within its limits is an autocrat. For spitting on the kitchen floor I heard a man roundly cursed, then ordered to bring a bucket of water and scrub the place. The men were required to enter the kitchen in moccasins or stockings, leaving outside the footgear worn while at work.

The food was abundant and of good quality. Salt pork, beef, potatoes, turnips, cabbage, onions, dried peaches, apple butter, molasses, hot biscuits, gingerbread, crullers, tea and coffee, and last, but most important, baked beans, are supplied in unlimited quantities. The food was all well prepared, particularly the beans, the latter being cooked in a bean hole; that is, a hole in the ground, which has been thoroughly heated by a fire, the embers and ashes of which are raked back over the covered iron pot containing the beans.

We were heartily welcomed by all hands, given a supper which only needed milk, butter and sugar to be perfect, and assigned a space on the kitchen floor to sleep on. I was tired but could not sleep. The room was hot and close, and, the light once out, rats ran over us in every direction. The cat, for there was one, did her best. One rat was caught and killed within a foot of my head.

The next morning the men asked us to go 3 miles back to a lake, where, from a rough raft, with a coarse hook and a piece of string, with pork for bait, they had caught in one afternoon 30 trout, weighing 31 pounds. But we were after moose, so pushed on.

There was a 3 mile portage around the Lower Canada falls, and a lumber team was to haul our canoe and dunnage for us. I walked ahead, hoping

for one of those chance shots which come when least expected. I was on the old Canada trail leading from the coast to Quebec, a trail followed by many a war party in the days when the French and the English struggled for control of Maine. The road was overgrown with brush and but faintly marked. The rain fell in torrents, the bushes were dripping with moisture, and I was soon wet to the skin.

I had been told that a plain trail branched off to the head of the lower falls, but in some way I missed it. At last, feeling sure 3 miles had been passed, I turned and started to travel through the forest until the river bank was reached. After a while a faint trail was found, apparently leading in the right direction. This I followed until it ended in an overgrown clearing, in the midst of which were the remains of a logging camp. The log walls were rotted down to within 2 feet of the ground, and in the center of the house grew a tree 12 inches through. I afterward learned it had been 50 years since the camp had been used. The best trees were cut from the forest near large streams many years ago. The lumbermen are now cutting second, or even third growth.

Once more turning in what appeared the direction of the river, I plodded on through the falling rain, chilled to the bone by wet clothing. Before long a faint trail was again found and followed, until to my amazement I recognized the old path leading to the clearing. My footprints made before put it beyond question. Unconsciously I had wandered in a complete circle. Everyone has heard such stories, but before this experience I did not realize how it could happen.

For a moment I considered camping under a tree, building a fire and occasionally firing a shot, that Darling might find me, for he had several times told me if lost not to wander, but to sit down and fire signal shots and he would look me up.

For some reason guides always commence by treating me with a pitying consideration which is most galling. I was especially anxious to give no grounds for this by admitting that I was lost, and so started to follow a creek, reasoning that all creeks must flow into the river, and once at the river I could find my way. This took me through dense cedar swamps, and progress was a continual struggle through wet branches, but I kept on and at last reached the river, near a large fall, at about 2 o'clock. I was shaking with a chill; my boots were full of water; no canoe was in sight. Turning a log for dry wood, I started a feeble fire, then fired a signal shot. It was answered almost immediately, and in a few moments the canoe came in sight down the river. Dry clothing, waterproofs and a drink of whiskey restored me to some degree of comfort. I had walked nearly 6 miles on the trail, instead of 3, and had come out at the upper instead of the lower falls.

Above these falls the navigation was easy, and we hunted steadily but without success. The boat was paddled up the little streams and foot trips made to right and left, each logan, or open place, being thoroughly scanned. All that time it rained. Each night we returned soaked to the skin. My gun was only kept in order by frequently taking it to pieces, wiping and oiling each part. The rivers and creeks were bank full, the meadows covered with water, and tramping in the wet woods was a torment, but the tent had a double roof, and we carried a heavy tarpaulin for the floor. It was the one dry spot.

Much beaver sign was seen, some of it fresh. A beaver dam and house are somewhat disappointing to a reader of Peter Parley's Natural History. I have seen many dams which were mere straggling piles of stick, curving sometimes up-stream, sometimes down, perhaps a foot in height, without regularity or special strength.

Certainly the depth of water was not materially increased. The sticks are firmly embedded in the mud, but there is little attempt at plastering, and no evidence of that impressive engineering instinct which I had expected. The houses are irregular and poorly built. In Maine, Michigan, and the Rocky mountains they are alike. With the exception of one dam in Maine I have never been impressed either by the design or the amount of labor involved.

The muskrat hole shows more engineering skill. The muskrat house is much better constructed. Neither equal in adaptability or workmanship the nest of the Baltimore oriole, but perhaps that is not a fair comparison.

We had been making an unsuccessful effort to call a moose, and were returning to camp late in the evening. The rain fell steadily, and, chilled to the bone, I crouched in the bow of the canoe. Suddenly within 3 feet of me there was a resounding blow on the water, as if it had been struck by a board. The spray flew over me, and I nearly upset the boat by a startled jump to my feet. Darling, laughing heartily, said it was only a beaver, and then explained that when frightened they would strike the water with their tail, which he supposed to be a danger signal to their neighbors.

In spite of the high water, trout were plentiful. Fishing from the shore, I caught trout which the guide immediately cleaned and cooked, so we were eating fish 15 minutes after they came from the water. The trout of the Upper Penobscot are game, and gave good sport, fighting much harder than fish of the same size from the lakes. Grouse or deer we did not shoot, for fear of frightening off larger game.

So it kept on day after day. Luck was certainly against us. We saw little sign of moose, and it rained the greater part of each day.

Reaching the tent late one afternoon, Darling commenced to cut

wood, and I to change my wet clothing. By a misstroke of the axe Darling cut his foot to the bone. Hearing his exclamation of pain, I rushed from the tent. The blood was spouting from his shoe, and he was leaning against a tree with set teeth and a white face. I helped him to the tent, out of the rain. It was not too soon, for he dropped at the door in a dead faint. To stop the flow of blood I improvised a tourniquet with a handkerchief and a short stick. Cutting off the shoe and stocking a ghastly gash about 4 inches long was disclosed. There was some flow of blood in spite of the tourniquet, for I had not a sufficient knowledge of anatomy to properly locate the artery, that a pad might be put over it; so dragging him to the bed I ran to the river for a bucket of water; then putting the foot on the bucket, I poured cold water over the wound. In a few minutes he revived sufficiently to be propped up and pour the water himself, while with a common needle I endeavored to sew the wound.

Darling would not allow me to use a trout leader, declaring it would poison the blood. The only thread I had was black, so I was forced to make a thread by twisting linen fibres from a handkerchief. Human skin seems tender and easily torn, but I was surprised to find how difficult it was to force the needle through. It could only be done by lifting the skin sufficiently to insert a chip of wood against which the needle could be pressed and then pulled through by taking hold of the point. I am sure no ordinary leather would have been tougher.

Darling again fainted during the operation. At last the sewing was completed, a rough job, but answering the purpose, and binding the wound with lint made from a handkerchief, I could somewhat loosen the tourniquet, the pain of which he found unbearable. A long stick was substituted, one end of which Darling could

hold, thus loosening and tightening it himself.

Knowing the man's reputation as I did, it interested me to see how completely he collapsed at the sight of his own blood, and how strong his fear of death was. The tears would run down his cheeks, his face would tremble, and he would ask me if the bleeding had not recommenced, or he would declare he knew it had and that he was bleeding to death. I only kept him up by repeated doses of brandy.

It was then necessary to cook supper and cut firewood for the night. The supper was easily managed; but the firewood! I was townbred, raised in an office, and had never handled an ax except incidentally or for amusement. To cut enough wood to keep a large fire burning all night is a big job. Dead wood does well enough for a blaze to warm or cook by, but for a steady fire green birch wood was needed. It was late in the fall, the air was chilly, and Darling complained bitterly of the cold. Through my inexperience it was one o'clock before enough wood had been cut to last all night. Between keeping up the fire and looking after Darling's foot, I slept little. Rising at daylight, trout enough for breakfast were soon caught. While they were cooking, I sat down to consider.

We were at least 20 miles above the Upper Canada falls, and therefore about 36 miles from the lumber camp. To go through the woods would be difficult, and an attempt would probably result in my getting lost. On the other hand, much as I had hunted in a canoe, I had never learned to steer, having always paddled from the bow, and to go through even the small rapids on the way would probably end in an upset. Again, Darling needed constant attention. He could not possibly collect firewood, and as the fire burned nearly as fast as I could cut, our provisions would probably be ex-

hausted before a supply could be accumulated.

Here was a quandary. At last I remembered that the evening before we had both imagined we heard the report of a distant gun, and had canvassed the possibility of there being a party camped below us. I decided it could do no harm to fire a signal of distress, and that it certainly was worth trying. Three gun shots close together are recognized as a distress signal everywhere I have hunted, both in the United States and in British Columbia. Three shots were fired. There was no answer. Waiting a few moments, I repeated the signal. That time the answer was immediate, and evidently within 3 miles. Again the signal was repeated, and again answered, so with a cheerful heart I set about dressing the wound and serving breakfast. Within an hour the canoes which we had passed on the way up were at the landing. Our outfit was soon packed in our canoe, in which rode Darling and one of the strange guides. I rode with the other guide in his boat. By 2 o'clock we were at the head of the upper falls. There they left us. It was hard work to get the men to take any compensation for their trouble.

Fixing Darling as comfortably as possible, I walked the 6 miles to a point opposite the lumber camp, and a signal shot soon brought the men out. Cunningham, the boss, started with 2 men, a sled and a pair of horses to bring down Darling, the canoe and the baggage, while I was at liberty to dry my clothing, which was soaked by the rain.

That night was spent in the cabin and I had a good night's rest, for not even the rats could keep me awake. Next morning Darling was much better. We were a long 20 miles from the North West Carry to Moosehead lake, and must go through some rough water to get there, so we made an early start, the warm hearted lumbermen doing everything to help us.

Darling was then able to steer. Beyond shipping a great deal of water, we had no trouble with the rapids, but our progress was slow, and it was dark before the 20 miles were passed. The rain fell in sheets. Missing the mouth of the little creek, which was overhung by bushes, we turned back and, paddling slowly, at last discovered it. The mile run up the creek gave no trouble, but before us was a swampy logan covering several hundred acres. Somewhere in this was the corduroy wagon road, but how to find it was a problem. Again and again we tried without success. At last I started to wade the shallow water around the margin, Darling keeping the boat as near me as possible. The recollection of that wade is still clear in my mind. The intense darkness of the night, the steady pour of the rain and the frequent falls over submerged logs combined to make me wretched.

Falling over in water perhaps 3 feet deep, my gun was lost, and only found after long groping in the mud. At last I bruised my leg severely on something which, by feeling, I found to be one of the logs composing the road. Following it to the end, I called Darling, fixed him as well as possible under the tent cloth and started through the woods to the Frenchman's house on Moosehead lake. Falling over stones and logs, floundering in holes, I was nearly 3 hours making the 4 miles, but at last reached the clearing. A signal shot brought a light to the window and a noisy welcome from countless dogs. Awakening his 2 sons, the Frenchman started with a sled to bring back Darling and the canoe. When they had gone I stumbled into the house, fell on a couch in my wet clothing, and

dropped to sleep, completely exhausted.

Darling arrived at daylight. By steady paddling we could reach the Mount Kineo house in time to catch the morning boat, so eating an early breakfast we started at once, for I felt anxious to get Darling to some place where his foot could have proper attention. A dense fog was on the lake, but Darling kept his course—by instinct, I imagine. On a projecting point we saw 2 deer. I did not care to shoot them, as we could not save the meat, so we tried to see how close we could get without startling them. Darling was at home in that kind of work, and we moved through the water without a ripple until we reached the shallow margin not to exceed 30 feet from the deer. I have never been so near to live game. At last they saw us. They jumped straight up the bank. The doe missed her footing, and falling backward floundered in the sand a moment, not over 15 feet from the canoe; then ran off toward the beach. The buck cleared the bank and was out of sight in a second.

Hearing the whistle of the steamboat roar through the fog, we fired a signal shot, and bending to the paddles reached the wharf to find the boat waiting for us. At Oldtown I put Darling on his train, and I started for home. It was the most unpleasant trip I have ever made. There were 13 consecutive rainy days. I did not fire a single shot at any game, and had vivid experiences with the firewood, swamps, etc. I have since made it a rule to carry surgeon's needles, thread, bandage, lint, and plaster, as well as a medicine case, but have had no occasion to use them.

"How did all this water get on my coat?" demanded the Deacon.

"That's the proceeds of the sale," said Molly-Cotton calmly, as she plugged her leaky boat.

HUNTING GOATS WITH A CAMERA.

A. E. STANFIELD.

Last summer Harry Pidgeon and I were in the mountains East of the Stickeen river, B. C., collecting specimens of the bighorn sheep, *Ovis stonei*, and photographing. As our main object was to collect sheep, we did not have time to

get many good live game pictures, but late one evening we obtained a photo of 5 Rocky mountain goats, which were on the side of a canyon wall, not more than 100 feet away.

They were on a narrow shelf of rock



AMATEUR PHOTO BY A. E. STANFIELD

THEY CARELESSLY LOOKED AT US, NOT APPEARING IN THE LEAST ALARMED.



AMATEUR PHOTO BY A. E. STANFIELD.

OUR BOSS PACK DOG.

scarcely wide enough, in places, to afford them a foothold; yet they seemed as careless and as contented as if they had been on an acre of level ground. Some of them stood near crevices in the rock and looked as if they intended to turn and take refuge in these as soon as they had satisfied their curiosity as to who and what we were.

While getting into a good location to photograph them we were, of course, very cautious, keeping out of sight all the time, fearing the least noise or a glimpse of us

would frighten the animals. When all was ready to get a snap at them, we stepped out in plain sight. Instead of running behind rocks or ridges, as we had expected, they carelessly looked at us, not seeming in the least alarmed by our sudden appearance. We could plainly see they were contentedly chewing their quids. I made one exposure, put another holder in the camera, and thought I would scare them in order to get a picture of them while they were scrambling over the rocks; but all the noises both of us could make only seemed to amuse them. Some of them were still lying down when I made the second exposure.

The goats as well as the sheep seem to be strangers to fear, although by the enlargements we found on the bones of both species, it is evident they do occasionally fall. We saw an old billy sunning himself one day on a small level place, on the brink of a precipice, perhaps 200 feet high. He was lying so near the edge that both hind feet were hanging over.

The sheep range higher in the mountains than the goats do. They come down early in the morning and late in the evening to feed, spending the days and nights up among the crags. We found it exceedingly difficult to follow their trails in places. Sometimes there is barely a toehold for a trail, and to get around a man must hold on with both hands, while the sheep skip around with ease, on the sheer face of a precipice where to fall would be certain death. One of the illustrations shows Mr. Pidgeon on a trail which we had to pass over many times, as it was the only way to get from one mountain to another. These goats are the greatest rock climbers of all American mammals.

I also send a picture of our ever-faithful pack dog, Tom. He was a great help when we were packing out of the mountains, as he could carry 25 to 30 pounds with ease. He always wanted to go with us, but preferred to leave the packs in camp.



AMATEUR PHOTO BY A. E. STANFIELD.

A DANGEROUS BIT OF TRAIL.

FEBRUARY.

One finds the days are getting longer now;
The sportsmen's tales have been too often told;
The fragrant skunk leaves tracks in mud and snow,
And men swear less about the freezing cold.

A SKIRMISH WITH PECCARIES.

J. M. SLOVENSKY.

In February a native named Camucho came to me, telling excitedly of an extensive and rich copper ledge which he had found in the Sierra Colorado mountains, 10 miles from town. He consented to take me to examine it, and preparations were made for the trip. Meantime my informant went on to say that it would be well to take along some shooting irons, as the spring near which we expected to make our camp was frequented by mountain lions, Mexican tigers, peccaries or wild hogs, deer and other game. This later information was broken as gently as possible to my friends, Ambrose and Jones, and though their knees shook at the mention of lions and tigers, they expressed themselves ready to risk their lives.

A 3 hours' drive brought us to the mountain, where a little spring keeps the skeletons inside the hides of a great number of cattle and horses grazing in the surrounding country, and camp was made in the bottom of the canyon.

Camucho's rich copper ledge was a vegetable-stained, good-for-nothing pile of rocks, and the trip expenses were charged to the wrong side of the ledger.

That evening no game was in sight except in the imagination of Camucho, who

fired 3 shots at a deer, which he did not get. This did not surprise us, as his shooting iron was a 14-pound, old style, .44-50 rifle which had never been cleaned.

The moon shone very bright, and sitting by the camp fire Camucho suddenly began to tremble. Pointing toward the spring he whispered, "Lion! lion!" Faces turned pale when a slight splash was heard, but there was courage enough left to catch up the rifles. An Indian procession was formed toward the sound. Friend A. discovered some moving object and, kneeling down, was taking deliberate aim when Camucho, who was the last in the procession, with a great relief exclaimed, "Vaca! vaca!"

The beast proved to be a cow. Our faces, after a while, recovered some natural color, the sledgehammer blows of our brave (?) hearts slackened their speed, and with sighs of relief our pipes were refilled. We tried to smoke, but the tremendous and frequent puffs carried by the gentle breeze into the canyon must have smoked out any ferocious beast that may have intended to drink at the spring. That night there was no further excitement, and at 5 a. m. breakfast was ready. At daybreak we scattered on the cattle and deer trails



COLLARED PECCARY.

After the drawing by John J. Audubon.

with peeled eyes, but for an hour no game was visible. Crossing a high ridge I peered into the neighboring canyon, and discovered 2 black moving objects. They were peccaries rooting, and I concluded to get nearer the game, which was about 600 yards distant. The trail was rough, with loose stones, and it was difficult to proceed without noise. When I had gained 200 yards I discovered one of the hogs across a deep ravine and farther from me than ever. Believing that my game was escaping, I hurried on as fast as I could, making noise enough to scare away anything in the canyon.

Meanwhile, I came among the trees where I first discovered my game, and to my surprise, 3 peccaries started on a run toward me. Their bristles stood erect, their jaws worked like machines, their mouths foamed, and in their language they seemed to inquire, "What business have you among us?" Remembering that I had an effective weapon in my hand, a .30-30 carbine, I shot the nearest.

This was an overt act, a *casus belli*, as I soon discovered. Four peccaries came from below, 3 from the left, stones rolled toward me from above—peccaries came from every quarter, grunting, squealing, and snapping their jaws like steel traps. Under the circumstances it took me but half a second to remember all the peccary stories I ever read in my life, and within the next half second I was 5 feet from the ground, comfortable in a fork of a tree.

The little beasts seemed astonished and

enraged at my escape and stopped short, never ceasing to snap their jaws, exposing their white, sharp tusks. I believed myself treed for a siege while the peccaries kept watch or tried to uproot the tree. Instead, my vicious antagonists did not come to the tree, so to show them I meant business I rolled over another boar.

This new victim settled the intentions of the peccary family. They hurried out of reach, across a deep ravine. Two old sows, with a numerous following of youngsters, went like a cyclone; the old boars retreated in a dignified manner, stopping frequently to eye me from a distance, and grunting comments to the drove. Two of them acted with impertinence, and I rolled them over at long range. The last one had his rump smashed, and when I went to look over the field he almost succeeded in hooking his tusk into my foot. Lying wounded under a brush, he jumped like a bulldog toward me, and I learned that I can outjump a peccary about 16 to 1. A long stick held toward him he would seize with his jaws, and if the stick happened to get between his lower and upper tusk it would be cut clean, as with a sharp knife. Inserting a short range cartridge into the carbine, I put an end to his sufferings, and after dressing the 4 we carried them to camp.

At no time before the shooting did I see more than 3 of the drove, yet I am convinced there must have been at least 50 of them. The meat of the peccary is juicy and tender, and its taste is like good veal.



PINE SNAKE.

AMATEUR PHOTO BY WM. H. FISHER.

Winner of 31st prize in RECREATION'S 4th Annual Photo Competition.



AMATEUR PHOTO BY J. E. TAYLOR.

ME AND YOU.

Winner of 28th prize in RECREATION'S 4th Annual Photo Competition.

Taken with Eastman No. 4 Senior Kodak

A WOODPECKER'S WORM RANCH.

I took the accompanying photo during a recent trip into Napa valley, in this State. It shows what can be done by an industrious and provident woodpecker in

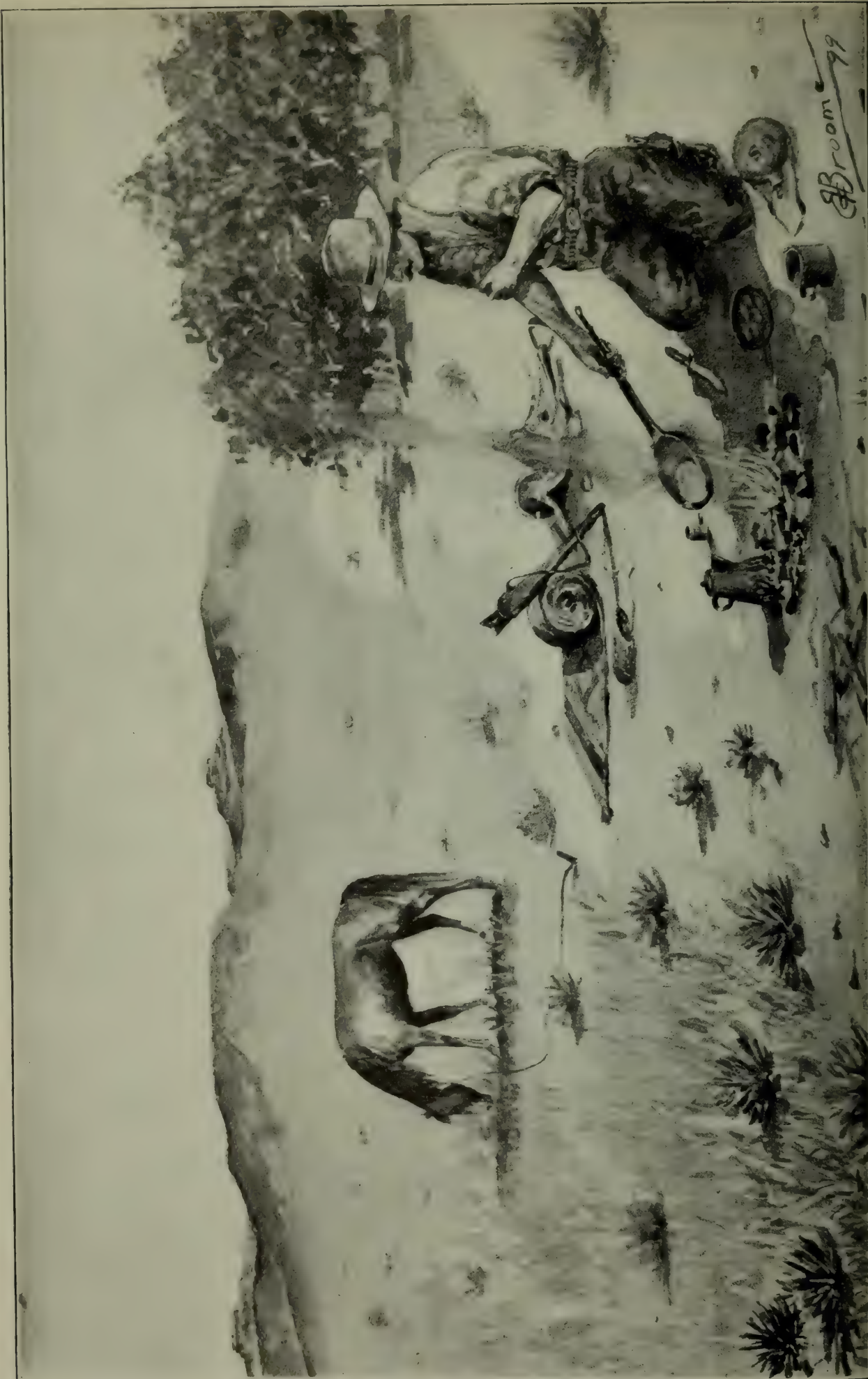
the way of storing a supply of food. The section of an oak tree shown, upside down, is 4 feet high, 34 inches in diameter across the widest end, and 20 inches across the other.

Although the tree was dead when cut down,

the trunk is solid throughout. Its surface is set with 1,960 acorns, of various sizes, each fitted snugly into a hole drilled by the woodpecker to receive it. A close measurement of the area thus perforated shows there are about 4,300 square inches of surface, which gives room for one acorn to every 2 square inches. Each acorn is fitted into its cell base foremost, with the top of the acorn flush with the surface of the wood. The acorns vary greatly in size, yet each fits the cell in which it is packed. This gives rise to a question as to whether the woodpecker shapes a cell and then selects an acorn to fill it, or gauges the acorn first and digs out a cell in accordance with its size. The bird stores the acorn in this manner not for food, but to secure the grub, the egg of which can always be found in every acorn thus stored away. The cunning bird knows that in time the grub will wax fat on the meat of the acorn, and then pay for the snug storage of its larder by being drawn by the barbed tongue of the watchful woodpecker and swallowed with infinite relish.

F. L. Clarke, San Francisco, Cal.





Broom 99

THE NOON LUNCH.

BASS FISHING IN SPRINGWATER.

J. A. MACKENZIE.

Southeast of Ayliner is a group of ponds known as Springwater. These ponds are the home of numerous small mouth black bass. It was there I first learned to love this noble game fish, and to angle for him in a sportsmanlike manner.

A bass angler goes through several stages of development. First he uses a cane pole and a click reel, for ordinary bait fishing; then the light, pliable fly rod and cast of dainty flies; to be succeeded, when occasion requires, by minnow casting. The selection of a rod is important. It took me weeks of careful study of magazine articles, catalogues, etc. At last I decided on a Bristol steel fly rod, 9 feet long and weighing 8½ ounces, as the most durable rod for the money. If the angler can afford it, a good split bamboo makes an excellent rod, but requires careful usage, and costs as much as 4 or 5 steel rods. After all, if you can get the same action and balance in the steel rod, where is the advantage in buying a split bamboo? Eight or 9 ounces is light enough for bass fishing. The rod must have enough backbone to cast the heavy bass flies, although small flies on Nos. 3 to 5 Sproat hooks are most successful here. An important point is the size of line required. I use a No. 3 enameled silk line, a lighter one not casting so easily, as it has not weight enough to bend the rod, and thus make it do the work. Smaller sizes might be used with lighter or longer, and consequently more pliable, rods. I advise every angler to learn to tie his own flies. Throughout the long winter evenings to tie a few flies is a foretaste of coming sport. They can be made works of art, giving much satisfaction and pleasure to the maker. White Leghorn cocks are cheap and so are diamond dyes. The best Sproat central draft hooks cost about a cent apiece. A small double gut loop is better than a snell, and is easily put on. The rest can be learned by taking apart a few ready made flies. Many varieties are not needed and only cause confusion. A few white millers and royal coachmen, tied on numbers 1, 2 and 3 hooks, for dusk and moonlight evenings; also for dark days; with some Parmachene belles, professors and grizzly kings, on numbers 3 and 4 hooks, for stormy weather and cloudy days, complete the list of winged flies required; while black, brown, gray, red and yellow hackles, especially the brown and yellow, are perhaps the best killers on all kinds and conditions of water. As a rule, the larger bass are not caught on flies. A small fly, say on a

number 4 or 5 hook, is taken more into the mouth and more fish are hooked with small flies than with large ones. It also casts much better with a light rod. Hooks should be kept sharp, and none but those of the very best makers should be used.

To become a good fly caster requires practice. There are but 2 motions, an upward and backward motion, which retrieves the line, and a forward motion, which casts the fly out over the water. In the former be careful to bring the rod only to the perpendicular or slightly past it, for if brought farther back the line will fall on the ground and a hook or a fly be lost in the forward cast. Also give sufficient time for the line to straighten out, between the backward and the forward movements. A friend to prompt one would be of great assistance. Both motions should be from the elbow, easy and steady. No great strength is required, the spring of the rod doing all the work.

Fly fishing is the highest attainment in the angler's art, but not the most difficult to acquire. Casting the minnow from a free running reel, with its delicate thumbing, is too difficult for many of the older skilled fly fishermen to attain. As with trout, there are many times when bass will not rise to the fly, and then the angler must resort to bait or go with an empty creel. If a bass once sees the angler nothing can tempt him to take the bait. In order to be successful the bait must be got out away from the boat or the shore where the angler is standing, and the farther away the better. The old school anglers still use 16 and 18 foot cane poles to effect this, but the bass are becoming educated, and minnow casting offers an effective, graceful and more sportsmanlike way of presenting the bait to such noble game. With a short, moderately stiff rod, a free running reel and a fine, hard braided silk line, the novice is equipped to begin practice. Fasten on a ½ ounce lead sinker, reel it up to the end of the rod, extend the rod to the right to a point nearly touching the ground, reel uppermost, thumb lightly, touching the spool with hand opposite the right hip. By an upward, sidelong but easy and steady sweep send the sinker to the left, the hand traveling across the body until opposite the left shoulder. The spool must be delicately thumbed until the lead is about to light, and then thumbed hard. This prevents it from turning too fast and tangling up the line. When I first practiced this method of casting I found it difficult. I learned, however, after many trials, if the reel was per-

mitted to pay out line from the beginning of the cast, there was not the tendency to backlash, or to throw the sinker behind me, while the cast was much longer. In casting to the right the rod is extended to the left, the hand opposite the left hip, and when the sweep is completed the hand is extended to the right as high as the head and a little to the front of a line with the shoulders. To cast to the front turn to the right or left and then cast. After the minnow lights in the water, reel it in, drawing it through the water with a jerky motion, to imitate a swimming minnow. If taken by a fish let him have it a few seconds before striking, and then strike with a quick but light twist of the rod. Keep the point of the rod up, give no slack line, and play on the rod until the fish is thoroughly exhausted.

Let us return to Springwater and a day's sport there. Early in October Fred and I secured a supply of minnows for bait, mounted our wheels, and started for the fishing grounds in a steady rain. Fred carried the bait pail, the rough road seeming hardly wide enough for his serpentine course, but although much water was spilt, all the fish arrived in good condition at the dam. We stored our wheels in the sawmill and prepared for the sport.

Putting on a 3-foot double gut leader, a number 1 Sproat hook, and a lively chub, hooked through the lips, I took a standing position in the bow of the flat-bottomed punt. Fred seated himself on the stern thwart, with the bait pail between his feet, and slowly paddled me up the pond, passing within casting distance of the most bassy spots. My method of casting the minnow was similar to fly casting, only the bait was allowed to touch the water on the back cast. On the completion of a cast the minnow was given time to sink a little and then worked inward toward the boat 6 or 8 feet, the slack being coiled on the left hand ready to be let out on the forward cast. In that way we covered more ground at each cast. By the time we were fairly under way the rain was coming down in big drops, churning up the surface of the water into a confusion of ripples, making it difficult for the fish to see.

Slowly my friend plied his paddle, stopping before each stump or submerged log until one or 2 casts were made. Not many yards from shore a V-shaped enclosure of logs was made by $\frac{1}{2}$ a boom being swung back to the right shore. Near it were 2 stumps, their tops just visible beneath the surface. To the left of these obstructions the water was fairly deep and sure to contain bass. As we neared them the old minnow was carefully replaced by a large, lively fellow, and the line got out for a long cast. Slowly the chub was lifted from the water behind and then sent rap-

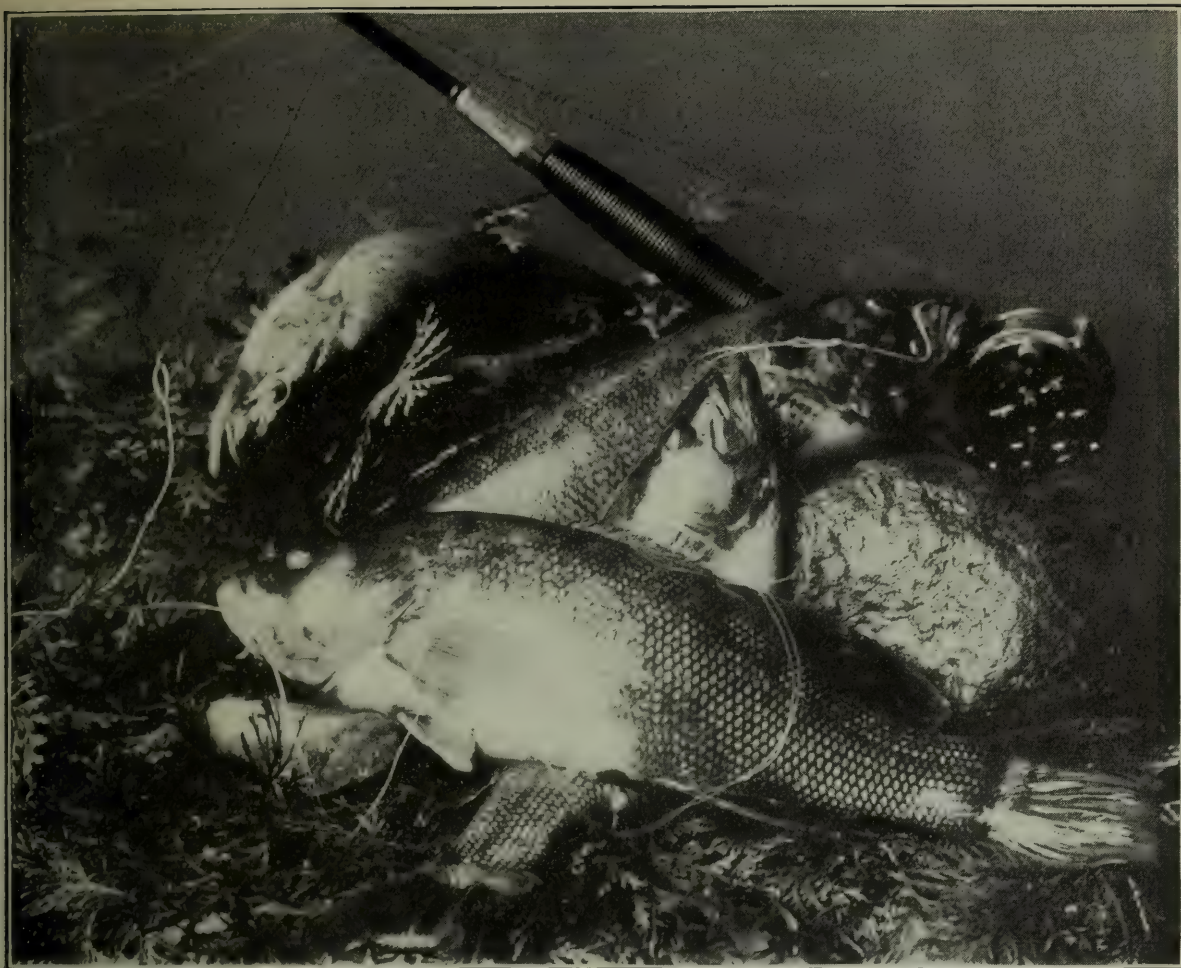
idly forward, taking out all the slack line. It fell a few inches from the boom, at once sinking out of sight. We waited anxiously for a strike in the pouring rain. The autumn foliage looked glorious through the sheets of falling water, and the mist rose from the pond. There was a nibble at the chub. I let him have it a few seconds, and then gradually reeled up until I felt the fish. He seemed inclined to make off with the bait, so I struck with a quick turn of the wrist. Fred was an old hand at that business and at once paddled out into deeper water. The small mouth's first mad rush for his former shelter had to be checked, so I turned the butt of the rod toward him and pressed hard on the line. The little steel rod was bent almost double, and the tight line hissed through the water as the fish darted off to the right.

After several efforts he began to yield to the constant strain of the bending rod, and a few feet of line were recovered. Gradually his struggles became fainter until, exhausted, he was brought alongside and lifted into the boat. A $1\frac{1}{4}$ pound small mouth black bass is truly, inch for inch, the gamiest fish that swims.

The chub had slipped up the leader and was still lively, so we gave him another trial, and 2 more fish were lured to their death by his taking qualities. One, under a pound in weight, but not in fight, was thrown back, to do duty next year, when a larger if not a gamier fish. We seldom kept a fish under one pound in weight, and on this occasion threw back 4 or 5. It is the only way to keep up the supply in small ponds, and, after all, it is not the fish we are after, but the sport. Then why take home a big string and deplete the supply? In this neighborhood there are not half a dozen anglers who use light tackle and fish in a sportsmanlike manner; but this number is gradually increasing, and as it does so game fish receive better protection. Even some of the older stock are getting ashamed to carry away a small fish.

The fourth fish was hooked near a stump alongside of the boom. His efforts to get the line around the stump were checked too hard and the hook was torn out.

Our best capture was made on the way back to the dam, in another shower of rain. Not far from the dam, in the deep water, leaned a small log, one end fast in the mud and the other within a few inches of the surface. Approaching this likely spot, we renewed our bait, selecting the largest lively chub in the pail, and by a careful cast I landed it within a foot of the log. It scarcely touched the surface when there was a boil, and straightway some 20 feet of line went out to the shrill music of the reel. There was no stopping this



AMATEUR PHOTO BY J. A. MACKENZIE

SOME SAMPLES OF SPRINGWATER BASS.

bass on a short line. It was give and take when opportunity offered, and we had some lively maneuvering to keep him from sunken logs. At the end of one of his mad rushes he leaped straight up in the air, seeming to stand on his tail, while trying to shake the hook out. His fall on the line was met by lowering the point of the rod, and he remained firmly hooked. Failing to escape, he dived to the bottom, but the water was too deep for reed beds, and we soon routed him out by a little extra pressure. As we gradually worked him in toward the boat he made a dart underneath it, bending the tip down in a way that none but a steel rod could stand. I turned completely around, passing the line under the bow, and played him on the

other side. Pulling against a constant strain will soon tire out any fish, and this one finally turned on his side, completely exhausted. Getting on my knees and extending the rod above my head and away from the fish I brought him to the side of the boat. The hook, which projected from his mouth, was quickly seized, and he was slid over the gunwale into the boat, 2½ pounds of hard fighting bass. We seldom had a landing net, and lost few fish, always playing them until they were exhausted before attempting to land them. Few rods except the Bristol will stand such a strain. It has the proper spring, and never takes a set, no matter how hard the usage.

We had taken 4 fish and were satisfied.

ALONG SHORE.

FRANK H. SWEET.

Gray days of winter;
Sun without heat;
Breakers and billows
That beat and beat;
Surf casting ice-bolts
Under our feet.

Sharp winds unceasing;
Sky without life;
Raging of waters
In endless strife;
Air full of needles
Keen as a knife.

TROUTING ON BEAVER CREEK.

C. L. MEYER.

One day in the latter part of May my son Frank and I boarded the 11.20 a. m. West Shore express for a day's trout fishing in Beaver creek, Ulster county. Kingston was reached at 2.20 p. m., where we changed to the Ulster and Delaware railroad for a 26 mile ride to Mt. Pleasant. We were met at the station by my old friend, Marshall D., the best trout angler of Duevall's Hollow. Placing our baggage on the old buckboard, we drove up the Hollow along Beaver creek about 4 miles, and before we realized it we had arrived at our destination. The creek was in just the right condition for fishing, as it had rained hard the day before.

It has always surprised me that so few anglers know of this creek. When I mention it to them they invariably say,

"Oh, yes; I know of the Beaverkill."

That, however, is a different stream, in another county. The Beaver creek to which I refer I consider the best natural trout stream in New York. It starts from 5 springs in Mink Hollow, high on the Catskill mountains, winds its way West-

ward, and empties into Esopus creek at Mt. Pleasant. The latter finds its way into the Hudson river at Rondout. Beaver creek has numerous small tributaries, such as Sickles' brook, the Little Beaver, Martin's creek, Shanty brook, and Grogkill creek.

Some 8 years ago the Esopus was stocked with 200,000 California rainbow and German brown trout. The result of this is the natural brook trout have been scarce in the Esopus as well as in Beaver creek. The German trout thrived and have attained nearly their full growth. Specimens weighing 4, 5, and 6 pounds have been caught, and others are frequently seen sunning themselves in holes. These trout predominate in the lower half of the Beaver, while in the upper half, as in all of its tributaries, native brook trout are to be had. All of the small streams have again been stocked with yearling brook trout by the State commissioners.

The morning following our arrival I arose at break of day, slipped on my hip boots, and sallied forth, prepared to take



AMATEUR PHOTO BY FRANK U. MEYER.

FRANK CAME UP WITH HIS CAMERA AND CAUGHT US IN THE ACT.



I LED HIM INTO SHALLOW WATER.

AMATEUR PHOTO BY FRANK U. MEYER.

anything that would rise to a fly. Following the road up stream 3 miles to the Dominie's meadow, I put into the water. My first trial was with Grizzly King and Queen of Water, but it was fully $\frac{1}{2}$ an hour before a trout rose to the Queen. He did not take it, however, and I was satisfied the trout would have nothing to do with royalty that morning. I then changed to Cow Dung and Black Gnat. I was quickly rewarded, as a German rose and took the Cow Dung on the second break. After a little fighting I landed him and found he measured 12 inches. That was encouraging. After awhile another rose to Cow Dung. I whipped him out without ceremony, but he fell off the hook in a clump of alders. I secured my next German, 9 inches long. Not to lose your first trout is an omen of good luck. In 3 hours I had in my creel 9 Germans, 4 California, and 3 brook trout of 10 and 12 inches, nearly all taken on Cow Dung. The brook trout I captured on No. 10 Black Gnat. As the sun rose higher, I changed to Great Dun and Cahill. The trout seemed to fancy the Cahill, as I landed 3 Germans and one brook. Half an hour later I again changed to Cow Dung and Coachman.

In rounding one of the large rocks in midstream, I cast in a deep hole. No sooner had my fly alighted than I received a shock that almost upset me. My rod bent double. Something gave way. It was

my Cow Dung. One of the 4 or 5 pound Germans took it. I was not quite prepared for this big fellow, but they will occasionally strike and they usually tear everything to pieces. I tied on another Cow Dung and proceeded down stream. Arriving at Hoyt's pool I cast in the rift at its head and pulled out a California that measured 14 inches. At the dock, or breakwater, I caught a 12 inch German, making my 22d fish for the morning's catch. When I reached the old mill hole Frank, with his camera, was ahead of me, taking views of the creek. I did not get a strike there, so I stopped. I had changed to King and Queen a number of times, but could do absolutely nothing with them. In previous years those flies, as well as the Professor, could always be relied on. It seemed that the Cow Dung, Cahill, Black Gnat and Coachman were the killers. I had covered 3 miles in $5\frac{1}{2}$ hours and did justice to my trout breakfast.

About 4 o'clock I again took up my rod and creel for the creek, fishing down stream from the house about one mile until 7 o'clock. My catch was 4 Germans, 2 California and 2 brook, measuring 9 to 12 inches. My total catch for the day was 30 and as fine a lot of trout as was ever pulled out of the old Beaver. After supper, Frank and Marshall D. went to the dock hole and returned at 9 o'clock with 2 Germans of about one pound each.

The previous July, Marshall D. had

caught a German brown trout that weighed $4\frac{1}{4}$ pounds, and had presented it to the proprietor of the hotel at Mt. Pleasant. It was on exhibition for a week. He caught it on a No. 10 Black Gnat at 8 in the evening, and it was the largest trout taken with a fly that season.

The next morning at 5 o'clock I went up stream to the Iron Bridge hole, about a mile away. Cow Dung, Great Dun, Abbey, and Brown Hen were the flies used. My catch up to 9 o'clock was 9 Germans, 2 rainbow and 4 brook. Again my Queen and King were failures. In the afternoon at 3 I began using the Abbey, with 6 foot leader, and leisurely making a 20 foot cast over Duvall's rock at the edge of the hole. Suddenly I got a strike that sent a thrill up my spine. A big fellow was fast. Assuring myself he was well hooked, I reeled in while wading to the first rift. Then I held a steady rod, allowing the trout to do all the fighting. Up he rose, and down he went, where he remained, trying to get under the rock to my right. Occasionally I gave him the reel, when the strain appeared too great, and managed to hold him. My excitement was intense, for I did not want to lose him. Marshall D. came up shouting,

"Don't let him get under the rock. Get him over the rift. Hold him steady. Don't give any line or you'll lose him."

In the excitement I nearly fell into the hole, as my foot slipped on a slimy stone, and how I ever recovered my nerve is more than I can tell.

Marshall was as much excited as I was,

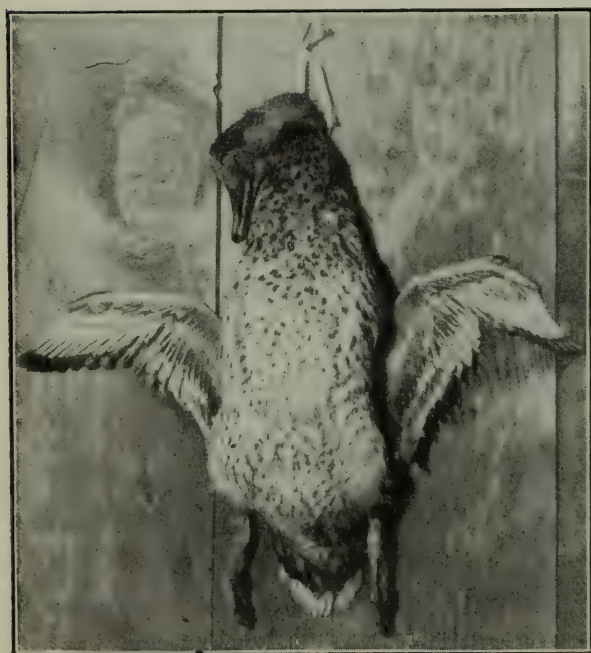
and jumped into the water, regardless of wet feet. After fighting this trout 20 minutes I led him, all tired out, over the rift into shallow water, where we had no trouble in landing him. In the midst of all this Frank came up stream with his camera and caught us fair and square. The trout, a German brown, weighed $2\frac{3}{4}$ pounds, and gave me a big fight.

The Abbey has a red body, gray and black striped wings, and 2 delicate, dotted tail feathers. I had whipped in that hole the day before, but without success. My old friend claims the trout was simply hungry, and that otherwise he would not have taken the fly. I agree with him, but I believe the delicate, dotted tail of the Abbey tempted the fish's curiosity.

We then went down to Jimmy Ives's pool to try for another large trout. This pool is about 30 feet wide, 60 feet long and 10 feet deep. Marshall D. claims there are 30 to 40 large trout in it. We caught 2 Germans there, 10 or 12 inches long, but no more would rise.

After supper we went to the dock hole to try White Millers. Unfortunately, I had but 3 Millers, on No. 8 hook, and they had been used. It matters not how large the trout were that rose to these, but it was the last of the Millers, as they were snapped off clean by the fish that struck; and they were 2 to 4 pound trout. The next time I will prepare myself with a supply of Millers for evening fishing.

The next morning we took the train for home, our creels filled with choice trout for our friends.



MURDERED BEFORE IT COULD FLY.

The enclosed photograph, taken by Mr. C. W. Buchholz, is not sent you as an exhibition of photographic art, but pictures in a sickening manner the result of a law that opened the duck season on Sept. 15th instead of Oct. 1st as heretofore.

Thousands of ducks unable to fly, most of them with wings less developed than the one shown here, were ruthlessly murdered, some shot as they tried to rise, but most of them killed with paddles and clubs.

The law is condemned by every real sportsman, and will undoubtedly be changed, but the damage has been done and continues. This picture should be a warning to some of our alfalfa legislators.

The law here was changed owing to the efforts of a Rich county man, but it is only fair to state that in his county the ducks mature earlier and are nearly gone by October 15th. However, it has been a disgraceful experiment and has disgusted the whole army of sportsmen.

W. H. Sherman, Salt Lake, Utah.

THE REGENERATION OF EAGLE BAR.

A. L. VERMILYA.

As was certain to have happened sooner or later, a copy of *RECREATION* had arrived at Eagle Bar, and stopped at the Gilded Glory saloon, where, in the course of events, everything that filtered into this little mining camp at last brought up. This magazine, however, had come direct over the 40 miles of stage road, and, without any hesitation or side excursions, had journeyed straight to the Glory, where, on the evening in question, it was causing considerable discussion and excitement.

Sandy Scones had discovered it at a book-store in Tucson, and, seeing therein 2 pictures which reminded him forcibly of the banks and braes of bonny Scotland, had bought it for about 6 prices. That evening he had taken his prize over to the Glory, and after dilating on the pictures, which, he declared, did not after all quite equal the scenery of his beloved land, had handed the magazine over to Bill Rush—commonly known as Coyote Bill, or the Coyote—to read to the crowd.

It lacked but 2 weeks till Christmas, and the boys had met to discuss ways and means for celebrating the day in a fitting manner. Books or papers were rarely seen at Eagle Bar; and when the Coyote, who for some imaginary reason was looked up to as the scholar *par excellence* of the camp, seated himself beside a faro table and began to read, he gathered about him a most attentive audience. The 2 kerosene lamps, with their tin shades, cast a yellow, sickly glare over the room, while the silence was unbroken save for the voice of the reader or the occasional shuffling of feet as some listener changed his position.

The Coyote read 2 stories which were roundly applauded by the crowd. He read sundry articles on various topics which the miners discussed with varying opinions. The arguments of the tenderfeet were, however, too much for these devotees of the 6-shooter, and excited their wildest mirth and derision.

"I tell you, boys," said Nosey Blake, who was an important personage in the camp by virtue of his ownership of the Gilded Glory, "that 'ere .30-caliber business which Coyote has been readin' us about makes me some sick;" and to ward off further indisposition he took a deep draught from one of the bottles before him. "I say most decided that anything short of a .44 is a d—n humbug. But them fellers what uses such triflin' we'pons as rifles and shot guns probably don't know no better. Jumpin' Texas! what sort of stuff would they write if they should get hold of a real 6-shooter?"

The Coyote read on with but slight interruptions from his audience, who smoked and listened. At last he appeared to run against a snag. His brow clouded, though he still read on, but silently, while the crowd anxiously waited for him to resume his reading in an audible tone. At last he raised his clenched fist, and, bringing it down on the table with a crash, said:

"Wal, I'm dished regardless! Boys, be we livin' in free Ameriky, or in—in—Egypt or some other oppressed land? Looky here!" and he proceeded to read to his audience how a certain lawless shooter had been heavily fined for killing a robin, and how the editor of the publication from which he was reading gloried in the fact, and boldly declared that the offender's punishment had been much too light.

"What!" exclaimed Nosey, "all that jest for one little, measly little bird not as big as my fist? Now I call that gettin' down pretty fine! Where is this here literary product got up, and who does it?"

The Coyote, who was rather proud of his elocutionary powers, scowled at this interruption, but scanned the cover intently a moment, and then gruffly answered the questions.

He again proceeded in a tone of great disgust to read the editor's objection to side-hunts and other illegitimate methods of taking game; how it was proposed to limit the bag of game or catch of fish, and sundry other points; to all of which objections were made in the strongest terms.

It might seem that the excitement and indignation of the miners was out of all proportion to the provocation, and so, indeed, it was. It must be remembered, however, that in isolated regions like Eagle Bar, where interest is self-centered and where no means are at hand for communication with the outside world or for broadening the mind, men become extremely jealous of what they term their "rights," and are quick to resent anything which it seems to them has a tendency to abridge these privileges, no matter if they are detrimental to the rights of others. So it was there, and these rude men probably believed at the time they were moved by the same spirit that actuated those stubborn sticklers for rights who participated in the Boston Tea Party of long ago.

At last the Coyote laid down the magazine, and in a determined voice said,

"Boys, this here is a matter which calls for our attention some prompt; an' I'm glad this disgustin' specimen of print has happened where we could see it. We don't

do no shootin' in these diggin's; that is, such triflin' stuff as birds an' rabbits; but we shore ought to set the example a lot that it is our good United States privilege to shoot up whatever kind of game we may desire, an' in any amount at any time. That there New York chap has got to be showed direct that even if he can set the style for Eastern dudes with eye-glasses, they's one spot into this here Nation that repudiates his idees an' his magazine entire. We must act onto this subject to once. But, first, everybody come up an' get his favorite brand of red-eye."

They drank in dignified silence, and again seated themselves around the table and in various parts of the room.

"I move, pardners," said Baldy Pelton, "that we organize ourselves an' app'int a committee to write to this here editor an' give him our opinions proper."

"Blow your organization!" said Nosey; "we don't need none! We'll get up a side-hunt for Christmas day, an' shoot up everything that walks on 4 legs, or wears a feather, an' I app'int Coyote Bill, Baldy Pelton an' Sam Sweetwater to draw up resolutions tellin' this Eastern can-opener our intentions exact. Before proceedin' to business, however, I propose that we all take this here RECREATION outside an' put a few punctuation marks onto it, jest to show our contempt for it an' the feller what gets it up."

This proposition was hailed with delight by the crowd, and, in spite of a feeble protest from old Sandy, who objected to the destruction of his home-resembling pictures, the book was taken out and pinned up with a knife against the side of a large box. The moon was shining brightly, lighting up the red and yellow target, and the Coyote, El Paso Ned and 2 or 3 others, walking a few paces away, quickly turned and emptied their 6-shooters at the object of their dislike. Leaving the frayed and tattered mass of paper still pinned to the box, they re-entered the saloon, and the committee at once proceeded to draw up their resolutions.

"Shoot me," said the Coyote in disgust, after dipping his pen into the whiskey glass containing the ink, "if I ain't plum forgot the directions, and now we've prob'ly sp'ilt 'em. That stops us; d—n the luck!"

"I guess not," said Baldy.

He went out and soon returned with the perforated magazine, which, as luck would have it, still bore the address intact. He remarked as he laid it on the table,

"Anything that roosts around the edge of a target is safe in Eagle Bar. We shoot at the center."

After an hour and a half of patient labor, and with the assistance of the various sug-

gestions offered by the assembly, the committee produced the following:

RESOLUTIONS.

To the Editor of RECREATION.

Whereas:

We, the miners of Eagle Bar, havin' read one of your magazines into which you make a fuss about the shootin' of a robin, and likewise tell about the chap what got the fowl bein' fined heavy; and also as how it is all right that he was so imposed onto; and

Whereas:

Through the medium of your book, and the thousands that it influences, you attempt to dictate as to when and what folks may shoot; and also callin' of 'em game hogs and fish hogs when they breaks the useless game laws; thereby you interferin' with their liberty and pursuit of happiness; and

Whereas:

We don't like your style nowadays:

Therefore, be it

Resolved:

That if your idees suit "sportsmen" they don't suit us; and

Resolved:

That we hold the idees promulgated in this 'ere alleged RECREATION of yourn to be injurious to the rights of free Americans; and

Resolved:

That to back up our principles we are agoin' to hold a side-hunt on Christmas day follerin', on which occasion we shall consider it proper to shoot up anything as walks on 4 legs or wears feathers or otherwise, and we accordin' notify you of our intentions.

Coyote Bill,
Baldy Pelton,
Sam Sweetwater,

Committee.

These resolutions were read to the assembly, who pronounced them O. K.; or, as El Paso Ned put it, "Special good and plain." The document was accordingly enclosed in a yellow envelope and given to Sandy, with explicit directions to deposit same in the postoffice at Tucson immediately on his arrival at that renowned city. The preliminaries of the Christmas hunt were next discussed and arranged, after which the party, evidently feeling that the labors of the evening had made a heavy draft on their nervous systems, indulged in an extra round of "Nosey's Nectar," a special brand of liquor of peculiar potency, and dispersed.

Christmas day at last arrived, and by that time the men's state of mind concerning the Eastern editor was something serious; while the language used in denunciation of that unfortunate man was such as to make angels weep. The evening before Baldy Pelton had said,

"Boys, although this foolishness of huntin' chipmunks ain't none in our line, it is howsomever our religious duty to bag everything that shows up to-morrow, from a sand-peet to a grizzly or an ostrich. It's the principle we've got to stand up for. We've got to show them honeysuckles that seems to be springin' up all over that they's one place into Uncle Sam's bean patch where they don't bow down to no knock-kneed, porridge-eatin', .30-caliber dudes what sleeps onto air cushions an' washes 3 times a day."

"That's whereas," assented the Coyote.

"Remember, boys, it's the principle of the thing that you're shootin' for to-day," said Nosey, as he stood in the door of the Glory to bid the hunters good-by. "There'll be 3 rounds of nectar waitin' for the side that brings in the most game."

And so, armed with 6-shooters, and with belts stuffed with cartridges, the party started forth to sustain a principle, and wipe off the earth every unlucky bird or quadruped that might have the temerity to show itself. They were to scatter and each hunt alone, as far as possible, thereby increasing their chances of securing game. For awhile all went well, each hunter being occupied with the thought of how the dude editor would turn pale with anger when he read of the big score they would make, an account of which the stage was expected to take out on the morning following.

After awhile, however, the hunt grew a trifle tiresome. The yellow sand gleamed in the sunshine, and occasionally from a tuft of dry grass came the shrill chirp of a locust; but a peculiar sense of stillness and desolation seemed to pervade earth and air. Game did not make its appearance in the flocks and herds which they had anticipated; for though the miners of Eagle Bar knew little concerning the fauna of the surrounding country, they had always confidently believed that birds and beasts abounded there. They were not aware that because of the work of certain meat hunters and skin hunters that region was destitute of game, though formerly it had been well supplied.

Now and then, when one of the hunters neared a rocky spot, he would see a small, sorry-looking animal, apparently a cross between an Eastern chipmunk and a common rat, scurry into a crevice in the rocks as though ashamed of his hermit-like existence. Sometimes even a lonely little rock rabbit might be descried, dozing at the door of his den; but there seemed an utter absence of birds. About a mile from the camp was a small stream—at least it contained water at certain periods of the year—and there stretched away to the Southward an expanse of chaparral. Thither at some time during the day most

of the hunters directed their steps; for there it seemed they must find game. But nothing in the line of fur or feather rewarded their efforts; and as they had plenty of time, they began to note the loneliness of their surroundings.

Sometimes a man would fire a shot or 2 in the hope of starting a bird or a rabbit, but he seldom realized his desire. The lack of the song and chatter of birds, now that they were listening for such music, became painfully apparent, and seemed positively oppressive. The hunters thought as they wandered about, of their boyhood homes—for none of them were indigenous to their present locality—of the coming of the birds in the spring as the winter snows gradually disappeared from the hill-sides; of their joyous songs during the long and pleasant summer; and of their noisy gatherings in the autumn to take their migratory flight. Again they saw the saucy robin in the old cherry tree; the blackbirds flocking by the river's bank; they heard the woodpecker drumming on the hollow stub, or the quail whistling in the corn. Again, in memory, these rough men roamed the woods at home and watched the bright-eyed squirrel as he scampered along the zigzag rail fence beyond the orchard and heard the chirp and chatter of birds as they flitted from tree to tree.

Here was desolation indeed, and now the sight of even a crow or a hawk would have been hailed with delight.

The sharp, condemnatory articles concerning the slaughter of birds, which they had read in *RECREATION* with so much disgust and scorn, looked different to them and the desolate condition of a land barren of the feathered songsters was brought home to them all with such crushing force that it is doubtful if any of them would have shot a bluejay had the opportunity offered.

"Baldy," said Sam, on meeting that modern Nimrod about the middle of the afternoon, "this ain't no fun and I'm going home. This has been the lonesomest day I ever put in, and I'll say right here that my notions in regards to that 'ere editor chap has some changed lately. I'd like to hear the song of a bird once more."

The hunt in a gameless region had affected all the men in about the same way, but in view of their sudden change of base they did not care to say much about it, though they thought a great deal.

The sun had nearly completed its journey through the heavens, and loomed large and red on the Western horizon, when the returning hunters, singly or in squads, began to arrive at the Glory, where they were scheduled to meet. They bore no game and said nothing concerning the day's sport; and Nosey, discerning that

there was something up, and being wise in his own generation, forebore questions. With quiet demeanor most unaccountable to the watchful dispenser of liquid encouragement the men came up to the bar and enveloped their particular brand of tanglefoot.

"Boys," said El Paso, when the exhilarating effect of the liquor had begun to show itself in symptoms of a return of his usual volatile spirits, "this 'ere day has been some lonesome to all of us, I reckon; and I don't wonder none whatever that sportsmen likes to see a few game runnin' round when they goes out shootin'. A day's hunt without no game inserted into the deal ain't such an excitin' circumstance after all."

None of the others had cared to break the ice regarding their change of sentiment, but now that El Paso had set the pace he found plenty of backers. The lonesome day and the memories of other times had done the business, and the miners were fair enough to acknowledge they had blundered.

Just then the Coyote came in, and without a word laid on the table a lone, little chapparal cock, or, rather, what was left of him after an encounter with a .44 bullet. The hunter looked from one to another of the group for signs of envy, for since he had seen the scarcity of game he well knew that few of the boys could have done much better than he, if, indeed, they had fared as well. He was greeted with a cold stare of disapproval. Sam was first to break the silence. He said,

"Wal, I am beat that any man as totes a gun would go and destroy a little bird like that! Yes, I am beat!"

"What's the matter with you all?" asked the Coyote in some anger. "Don't that 'ere bird count all right? If any of you has done so much better than me, trot out your game! I don't see no great lot layin' 'round! Let's see how you've been backin' up them there principles o' yourn."

"Principles be blowed," said El Paso. "We ain't no hogs that wants to push off the earth every little bird as flops a wing, and special when there ain't none to speak of in this region."

El Paso had experienced a complete change of heart in regard to game protection, and had the courage of his convictions.

The Coyote's face was a picture of anger and amazement; but dropping his hand to his 6-shooter while he fixed the speaker with his eyes, he said,

"The man as insinuates that I am a hog has got to back up his reason for such opinion with a gun."

"Which I am prepared to do instantaneous," replied El Paso, rising.

The crowd filed out into the open air,

where, in the "discussion" which followed, the Coyote received a bullet in his right arm and had his left ear slightly grazed. That the casualties were no greater was due probably to the semi-darkness of the hour.

That evening there was a great deal of quiet drinking at the Glory, and the committee seated again round the faro table labored earnestly, assisted as before by the views of the assembled miners. Baldy Pelton, though not so efficient a scribe as the wounded Coyote, who, with his arm in a sling, sat silently in a corner of the room, drinking heavily, and thinking, reduced their deliberations to writing, and the next stage carried out the following letter:

Editor of RECREATION:

Dear Sir—We write to ask you to turn down the letter we sent you on the 12th. Our ideas has changed total since the Christmas hunt, and we now have a regulation here makin' it some risky for any man to shoot up birds or beasts (exceptin' rattlesnakes and hoss thieves) around these diggin's.

You will find enclosed express order for dust to pay for 27 yearly subscriptions to that 'ere RECREATION o' yourn, which send same in a bunch each month to Henry Blake, Eagle Bar, Arizona, 40 miles North of Tucson.

If there's any way to increase game more plenty where they ain't none at present, please let us know and we'll do it. We have this evenin' app'inted 3 game wardens for the camp, and the whole season is now closed for 3 years.

Yours respectfully,

Baldy Pelton,

Sam Sweetwater,

Committee.

P. S. Coyote Bill can't sign, on account of engagin' into an unfortunate argyment, during which he was shot up some by a party that believes in game protection.

Bill thinks just as we do now, and insists on payin' for 6 subscriptions to the magazine.

The miners of Eagle Bar are to-day numbered among the staunchest game protectionists of the country. The chapparal is now inhabited by a fair quantity of game, which is jealously protected, and hunted only during the open season. Most of the miners use shot guns of the latest pattern, but a few, who care more for lots of fun and noise than for bagging game, look with disfavor on that weapon and still pin their faith to the 6-shooter. RECREATION is regarded as authority, absolute and conclusive, on all subjects of which it treats; and through its influence the camp has, in truth, been regenerated.



AT CLOSE RANGE.

AMATEUR PHOTO BY H. H. WELLS.

Winner of 27th prize in RECREATION's 4th Annual Photo Competition.



AMATEUR PHOTO BY W. J. DICK.

THE CONTEMPLATIVE WOMAN'S RECREATION.

Winner of 25th prize in RECREATION's 4th Annual Photo Competition.



AMERICAN COOT, *FULICIA AMERICANA*.

A GROUSE HUNT IN THE TRINITY MOUNTAINS.

D. S. BALLARD.

A 50-mile drive behind Burke's mare took him and me to Bridgeville. The following morning found us on our way farther into the mountains. Two saddle horses and one pack horse, 2 shot guns and a rifle, with the necessary articles for camp, comprised our outfit. The weather was hot, the pack horse lazy, my saddle horse crazy, and we made slow progress. That night we stopped at the Kuntz place, and Kuntz told us where to find plenty of game. The next day, after a hard, hot climb up the South Fork mountain, we reached the camp of Joe Creighton, a veteran hunter and trapper. We camped close to Joe, and are indebted to him for advice as to good hunting grounds.

After resting until 3 o'clock we started out to find grouse. Burke carried a .10-gauge breech-loading hammer gun, and I a new .12-gauge Ithaca hammerless. The first grouse that rose I dropped with the Ithaca, and Burke got the next one. Another lit in a tree, 60 yards away, and Burke gave it the other barrel, but got only feathers.

The next morning Joe and Burke started up the mountain after deer. I went with them to the head of a gulch of cedar and fir timber, where we separated, they going up the mountain to the low, thick brush and scrub oak, where the deer are to be found in greater numbers, while I worked down an opening at the head of the timber. A grouse rose out of the grass and fern, the Ithaca spoke, and my bag claimed a bird. Going through the timber to the open glade toward camp I spied 2 more grouse sitting on a knoll. The right barrel brought one down, but I stood there trying to cock the left barrel with my thumb and did not remember I had a hammerless gun until the other bird lit in a tree 50 yards away. I then gave it the left barrel, and overshot it. Slipping in another shell, I held lower and got my bird. Another, in a high cedar, was bagged, and I started for camp. As I drew near it a grouse rose. I felt for a hammer, fumbled with the safety, and then sent a charge of shot after the bird, but succeeded only in cutting a trail through some cedar boughs. Another bird rose to the right and flew across my bow. The safety was already up, and I sent him a greeting. He flew on 30 yards, lit in a tree, performed some acrobatic feats on a limb and fell out dead. He was shot in the head, but still flew 30 yards and lit.

I then had all the grouse we could use before they would spoil, so I hit the trail for camp. Joe and Burke had not been

idle. Their dog, Maje, started a deer, which ran past Burke. Then .45-70 went to his shoulder, a quick, careful sight, a sharp report, the deer jumped twice and fell dead. The bullet went in behind the shoulder, through the lungs, and came out higher up. After resting we went out and brought in the game. We then had plenty of meat and divided with Joe, dried some, ate grouse, and were happy. After that we hunted grouse when we needed them.

On our next hunt Burke's gun, which had come across the plains in the 70's, failed to go once in 5 times. He got 2 grouse and I one. The evening before we broke camp Burke wished to take 2 or 3 birds home, so we went out once more. Burke ran into a bunch of about 25, but his gun snapped again until all were gone but one, sitting as high up as he could get in a tree. Burke tried for him, the gun worked that time, and he got his bird. The shot started a grouse my way, and I bagged it. The sun was setting, so we turned toward camp, regretting that the last day of our hunt had closed.

The next morning we broke camp and bade good-by to our friend Joe. He had royally entertained us with stories of the sea, the navy, hunting, and of old Clubfoot, the 1,800-pound grizzly, who ranged all the way from Lake county to the North pole, and who stood with his head between his paws while an Indian emptied a Winchester into him, then turned and made off. Once Joe met Clubfoot on the trail with a hog in his mouth. The bear stepped aside, let Joe pass, and went on to enjoy his pork. Joe did not say whether it was a game hog the bear had.

Clubfoot acquired his name when he was caught in a 200-pound trap made especially for the purpose and packed out on a mule. The bear got into the trap, which was not chained to anything. He sat down on the first rock pile he came to and smashed the trap to pieces, losing the toes of his fore foot in doing so.

When we reached Bridgeville we found a friend awaiting us with several barrels for our game. We told him we read RECREATION and were not swine. We killed 12 grouse and one deer, and had all the meat any 2 men could use. None of it was wasted. We went for pleasure, not to slaughter. We feel better than if we had slaughtered 100 grouse and 20 deer. We left some for others, although we could have killed more if we had hunted every day. Go ahead, Coquina, you are on the right trail. The game hog must go.

AN OBEDIENT PET.

While living in the foothills of Southern California a few months ago I thought I would catch a fox or 2 and tan the hides; so one bright March morning I set out with 2 of my friends. We loaded our outfit on a pack burro, walked several miles up a trail, struck off into one of the canyons and found a good camping place.

After a meal of coffee, bacon and bread we set the traps between 2 big rocks, dragging a piece of meat along the ground over the traps to make a trail for the fox to follow. Then throwing some meat around, we left for camp. We repeated this process several days without success, but on the fourth night we caught a fine red fox, about half grown.

The next day we left for home, taking the fox with us. It was several days before he would eat, and then he took little food. We kept him in a dark room the first week, where he became fairly tame.



AMATEUR PHOTO BY T. MCK. HENSZEY

PLANNING MISCHIEF.

Then he was tied under a tree, with a box to sleep in. Still, during the 7 or 8 weeks we had him, he never grew perfectly tame. He always ran into the box and growled when anyone came near. We were careful to keep the dogs away, but one morning he was found dead in front of the box with several holes in his neck, and we were never sure what killed him.

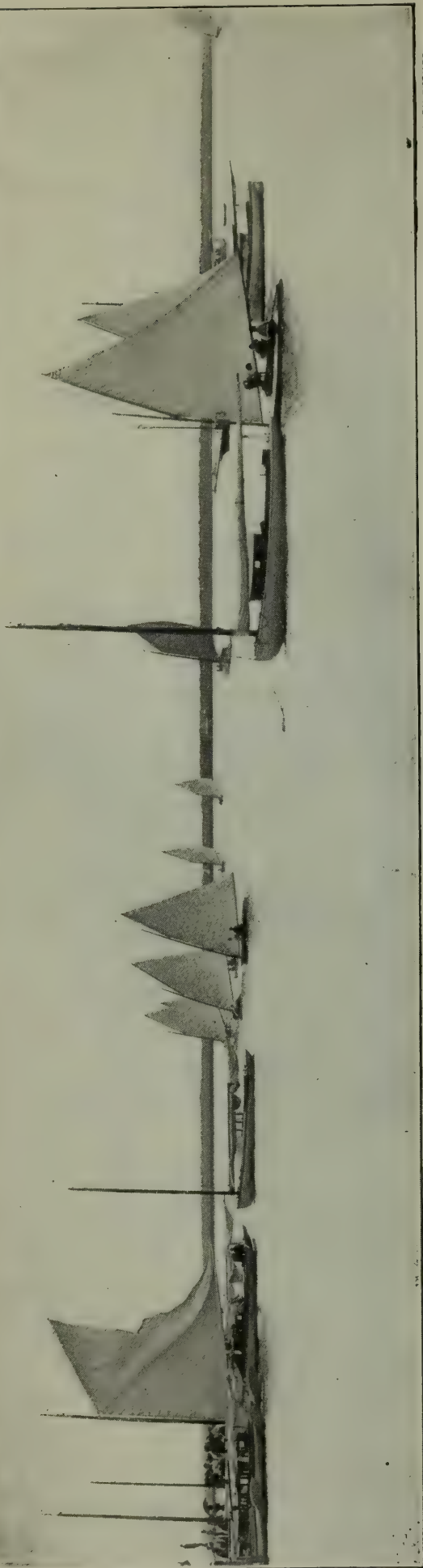
If anyone has been more successful in taming a full grown fox I should like to hear about it. *RECREATION* is a great magazine, and I am glad it is giving the game hog what he deserves.

"Now that the baby has come, I suppose you are still happy," said the bachelor friend.

"Happy? Yes," replied the young father; "but scarcely still."

AMATEUR PHOTO BY HARRY REEVES

THEY ARE OFF.
Winner of the 35th prize in *RECREATION's* 4th Annual Competition.





A DAM GOOD TIME.

AMATEUR PHOTO BY L. P. CORDELL.

Winner of 32nd prize in RECREATION's 4th Annual Photo Competition.



YOUNG GREEN HERON.

AMATEUR PHOTO BY DR. J. B. PARDOE

Winner of 26th prize in RECREATION's 4th Annual Photo Competition.



AMATEUR PHOTO BY R. A. NICHOLS.

FORGIVE US OUR TRESPASSES.

He was caught in the act by the camera, a witness whose testimony is unimpeachable, but just what charge to bring against him is the question.

He can scarcely be accused of being a fish hog, for his total catch for the day was but 10 medium sized trout, 6 being taken from the pool shown.

A charge of trespass might be well sustained, were it not for the fact that he is

angling on the lease of "The RECREATION Fishing Club," of which he is promoter and president.

Worcester County has many beautiful trout streams, and, thanks to a rigid enforcement of law, many a quiet pool "up the road a bit" and "over there," yields a fair catch to the skillful angler. Please find enclosed \$1 for membership in the L. A. S. R. A. N., Worcester, Mass.



We are the great St. Louis fish butchers and our other names are J. J. Burke and Carson Griffith. You see we caught a barrel of black bass in 2 days, and are proud of our great record. We could not forego the pleasure of having our picture taken with our wonderful catch

It is a pleasure to know that you were interested in our "birdless hat show," as it was called. Ever so many pictures of the hats were taken, but all by newspapers, and we have none ourselves. I send you with this to-day's San Francisco Call, which has pictures of some of the hats, though its article emphasizes the historic hats. I do not know whether you can use the pictures in RECREATION or not. The historic hats were merely a side issue, to bring out the contrast and add interest.

Such a thing had never been given on the Pacific coast before, and the newspapers, from Mexico to British Columbia, have written about it, and so have helped us immensely. They have all taken pains to bring out our aim, when they wrote about it, and only one that we have heard of has scoffed at it. So I think we can honestly claim to have helped the cause by making a large number of people think about it.

We do not mean to drop the matter, but shall probably wait until spring, just before the spring openings in the milliners' stores, before taking any further action.

Nellie M. Gleason,
President Ebcl Society, San Francisco.



PROSPECTING.

AMATEUR PHOTO BY LILLIE A. BRANDT.

Winner of 34th prize in RECREATION's 4th Annual Photo Competition.

ONE SHOT ON THE WING.

WM. M. HUNDLEY.

Jim and I were mighty hunters as far as our 10 years in the world and the limited possibilities of an antiquated fowling-piece would admit. Jim, my colored factotum, usually discovered the game and always carried the spoil, while I did the shooting. We divided the glory. We knew nothing of seasons, and no game laws existed in those days. The plantation was ours to roam over at will, and the wild things on it were as the air, the sunlight and the flowers that grew by the hedges—the belongings of no man. Our great desire was to bag a quail.

One day as we lay under the shade of a hedge, resting after laborious effort that had ended in failure, we saw a splendid old cock come out of the grass and hop to the topmost rail of the fence just over the highway. That was the chance we had longed for, worked for and dreamed of many a day. I carefully poked the old gun through the hedge, but my heart came up to my throat and I was forced to breathe before I could aim. Alas! the hesitation was fatal to our hope. A boy that came barefooted down the dusty road unobserved by us had seen the bird, and just as

I was about to press the trigger a stone, unerring from his hand, robbed us of our intended victim. There was a cry of rage from the faithful Jim, a scramble through the hedge, and then a tussle with the luckless "po' white" interfeer with our sport, succeeded by howls of pain that brought a plowman to the rescue; but still, we had lost our bird.

A few days later the pressure of a gentle hand on my shoulder aroused me from slumber just as the first rays of the rising sun came through my window.

"Git up, Mars' Will," Jim was saying; "de pa'tedges is whis'lin' ebry whar. Git de gun, an' I 'spec' we sho' kill one 'fo' breckfus."

We were afield in a few minutes, and guided by the welcome piping were stalking the unsuspecting quails. Several were approached with our usual success, but finally we peered over the bank of a ditch, along which we had crept, to behold a beautiful bird perched on an ear of corn not 20 feet away. I rested the gun on a convenient bush and carefully took aim, but before I could shoot poor Jim, quiver-

ing with excitement at my side, laid his hand on my arm and gently whispered:

"Ef you shoot dat pa'tedge don't yo' 'spec' you' spile dat roas'en'-year?"

Ah me, miserable! I had not thought of that. The corn was our neighbor's; we had been all too carefully schooled in *meum et tuum*, and we were only 10 years old.

Sorrowfully we picked our way out of the ditch and turned our steps homeward, for the sun was now high in the heavens. Quails were still piping all about us, but we heeded them not, having abandoned ourselves hopelessly to eternal bad luck. While we were stumbling along through the clover a pair that doubtless were nesting took wing just at our feet. Desperate, I raised the old gun and fired the way they were going. One shot caught the cock on the wing and he fluttered to earth. There was a wild yell of triumph from 2 lusty young throats, and a scramble that ended in capture, despite the high grass.

That ended our sneaking on quails. In that moment supreme we became heroes and wing shots. It was many a day before we repeated the feat, but the faith that was in us led on to success.



A REFRESHING DRINK.

AMATEUR PHOTO BY HOMER HILL.

Winner of 29th prize in RECREATION'S 4th Annual Photo Competition. Taken with Bulls-Eye Kodak, Achromatic lens.

A NEW EXPERIENCE IN MILLINERY.

GENE S. PORTER.

All my life I have worn birds and parts of birds as hat decorations and have given the matter no thought. Had I thought on the subject I should have reformed long ago, for no one appreciates the beauty of the birds, the joy of their songs or the study of their habits more than I do, and few have spent more time in the woods and along the water studying and photographing them. The war RECREATION has waged against the slaughter of birds for millinery purposes has so impressed me that I have decided never again to buy a bird or any portion of a bird for hat or bonnet trimming.

A few days ago, firm in this resolve, I went out to buy a hat. I wanted a large imported one, of style, becomingness, and color to harmonize with my coat and furs; and I did not want any of my little feathered friends mounted on it as a monument to much killed joy and hushed song in birdland. I visited 3 shops and found several hats that suited, except for the bird trimming; but they were handsome pattern hats, which the milliners knew they could sell as they were, so they refused to make any change. As I entered the fourth place, tired and cross, I saw a hat that suited as if it had been made to order, except that it bore quite a little flight of birds. I bought the hat and 3 handsome plumes. I then borrowed the milliner's scissors and cut the birds off and to pieces. Then I handed her the hat and plumes and told her to have her trimmer place them and bring me the bill. It was worth the price of admission to see her face. She thought I was mad, and glanced furtively out of the window to see if there was a policeman near. When she brought the hat back she said,

"I think it is quite as handsome as before, only birds are more stylish this season."

I told her I thought it just as handsome and more stylish, and no living creature was hurt, for if ostrich plumes were not pulled when ripe they fell out, whereas that hat originally represented the killing of 6 linnets. She said,

"Oh! it is a question of conscience, is it?" and she was visibly relieved to feel she was not dealing with a lunatic. I said it was a question of conscience, and since the iron had entered my soul it was burning deeper every minute. I asked her how many slaughtered birds she thought her stock represented? She swept the room in a long glance. It was the usual thing,

2 sides and an end, long tables down the middle, and boxes, cases and drawers full of hats. One show window was given over to pattern hats. The other, 6 feet wide and built back into the room 9 feet deep, making 54 square feet, was literally carpeted and piled high with a rainbow mass of birds and plumage. Every hat in the store was trimmed with parts of birds or with one to 6 whole ones. She said,

"I should not know how to form an estimate," and as I studied the situation a little I saw I should not either. In the window display were traces of almost every bird, from a parrot to a humming-bird. The excuse that they were coarser birds, such as robins, larks and blackbirds, was refuted in three-fourths of the cases by the natural plumage and the smaller and more delicate quills of many of our blithest singing and most gaily plumaged birds.

As I left the shop I saw standing in front of the window a man I knew—a gray-haired judge, of great learning, wisdom and probity. Disapproval stern and strong was writ on his face. At that instant another man stopped beside him and together they looked at the display. I lingered over a glove button and fussed with my gown, for I was anxious to hear what they would say.

"Well, Judge," said the second comer, "what do you think of it?"

"It would make Coquina sick," said the old judge, slowly.

"You don't seem to like it yourself," suggested the other.

"I don't like it," said the judge, with stern emphasis. "It is a shame! It is a crime! It is worse this fall than I ever saw it before. This window represents probably 500 dead birds, not including the other window and hundreds of trimmed hats inside. I can pick out robins, larks, orioles, linnets, finches, wrens, humming-birds, redbirds, blackbirds and red-winged blackbirds. This is only one store and not the largest; and this is only one city out of thousands. There is no estimating it. Shields is right, sir; we must legislate. At this rate our fields and forests will be stripped as bare of birds as the desert of Sahara before public sentiment can be awakened. Our women don't realize what they are doing. It makes me sick, sir, sick!"

I could not with decency pretend to work over my glove buttons any longer and was compelled to go my way.

FROM THE GAME FIELDS.

TWO NORTH DAKOTA BUTCHERS.

While on a hunting trip to Four Mile creek last fall we had a most remarkable experience. On wading into a slough about sundown we discovered hundreds of ducks, mostly teal and mallards. My companion, Chaplain Hadley, is a dead shot, notwithstanding his ministerial profession. We fired into the slough, and when the ducks got up we both raked them. Then we waded into the slough and picked up 75 ducks, about 20 wing-broken ones having escaped.

We believe this is the record for last year. As witness of this hunt we refer to Mr. Stacey Corwin, Agent, at Bull Head Station.

Frank Murphy,
Ivy Hadley,

Fort Yates, N. D.

Chaplain Hadley should feel heartily ashamed of himself for having committed such a slaughter. As a minister of the Gospel he should teach decency in field sports as well as in other sports and pastimes, and I trust he may do so in the future.—EDITOR.

PASSING THE LIMIT.

We have a marsh of 3,000 acres under fence. We own the ground, have a club house, and are incorporated under the State law as the Rice Lake Hunting Club, with a membership of 25, and have 5 shooting privileges. We had the finest mallard shooting last fall we have ever enjoyed. On 5 consecutive Mondays, commencing October 16, I brought in 20, 48, 25, 24 and 30—all mallards. A party of 9 of us on October 23 brought in 288 ducks, mostly mallards. The marsh is 12 miles from our city and as most of the members are in business in this city we cannot get away more than one day at a time, usually Monday. We do not shoot Saturday nor Sunday.

The biggest score for one gun one day was 95 birds; next highest, 72, and 35 and 40 several times.

J. C. Thompson, Jr., Canton, Ill.

You and your friends overstepped the bounds of decency every time you killed more than 20 birds to the man in any one day. If you were sportsmen in the best sense of the word you would be satisfied with 10 birds each for a day's shooting.

That you own the land does not give you a right to slaughter the birds. They belong to the people of the State at large and you should recognize the rights of others. Furthermore, you should look farther ahead than to-morrow. Would you not like to have a few ducks left 10 years

hence? Certainly; but if you and your associates continue your reckless butchery there will not be a mallard left in the whole county 5 years from to-day.—ED.

I prepared the above letters, with comments thereon, for publication; but knowing Mr. E. S. Thompson's sentiments on this question of handling game butchers, I sent these letters to him with the request that he censor or censure them as he might deem necessary. Here is his reply:

On the question of roasting pork, you know I am with you to the last ditch, in principle. The only disagreement is in manner of warfare. I do not believe in "dum-dum" bullets and "no quarter." The first turns public opinion against us and loses many who are with us in spirit; and the "no quarter" principle fosters desperate resistance and removes all possibility of a graceful surrender, followed by possible conversion to our way of thinking. In fact, I am inclined to let first offenses go with a warning. By such a method we could, I believe, turn the sinners into friends instead of mortal enemies. The man does not live who does not fear a roast in print. You have in your hands a terrible weapon, but I am sure it can be made more terrible by securing the support of a considerable body of men who do not yet realize how much harm they are doing by their reckless killing of game.

The word "hog" is such a strong one that its full terrors would be better used on rare occasions, and a large number of sensitive people would escape shock. In place of "A Pair of North Dakota Shoats" I should say "Two Shameless Butchers in North Dakota"; or even leave out the "shameless," and tone down the rest of the article so that the Chaplain would not be inspired with lasting resentment, but would begin to think, "Well, may be it wasn't such a grand thing after all"; and later he might subscribe to RECREATION, join the L. A. S., and promise never again to commit such butchery. It is obvious from reading the letter they had no idea they were committing a crime.

In the J. C. Thompson matter I should rather head it "Passing the Limit." When we remember that within a year club members have boasted in print of 400 ducks a day to one gun, we cannot expect these men, who are putting up their money for the privilege of shooting, to believe all at once that they are sinning when they kill 20 to 50 birds a day on their own grounds. They must be educated up to it, but also kept with us. We want their influence on our side. I am with you in the fight and am ready to do all in my power for the

cause you are so strenuously championing.
Ernest Seton-Thompson, 144 5th Ave.,
New York.

I thoroughly appreciate Mr. Thompson's good advice, and have accordingly changed the headings and toned down my comments on the actions of these men as he suggests. I trust Chaplain Hadley, Mr. Murphy, Ivy Hadley and Mr. J. C. Thompson will thank Mr. E. S. Thompson for saving them from the severe criticism they would otherwise have been subjected to. I also trust they may now understand the seriousness of their offense against good morals, and may never again be guilty of such destructive and unsportsmanlike conduct.—EDITOR.

FISHING FOR A GRIZZLY.

Some years ago a party of friends and I were out about 2 weeks on a hunting trip in the mountains of Mendocino county, Cal. Game was abundant, including the old-fashioned grizzly, who put in an appearance more frequently than we thought necessary or convenient. Our camp was usually located in some open glade where pasture for our horses was good and water convenient. These conditions seemed to accord with the ideas of the bears, and we found them frequent visitors. They would walk along the ridge until they found a wild-oat point. Sitting down, they would toboggan down the slope into the valley, to the utter demoralization of our horses, who invariably gave us notice of the bears' approach by a general stampede. As these visitations were always at night, the bears escaped the fatal results at our hands that would have attended their temerity had it been light enough for us to see to shoot. At least that was our idea.

One morning 2 others of the party and I took our fishing rods and started over to a stream, at the bottom of a deep canyon, which promised a string of trout for dinner. The results fully verified the promise. We were just about to return to camp when, lured by a deep pool beneath a large boulder, I thought to try a few more casts before giving up the sport for the day. Stepping out cautiously into the stream, I threw around the boulder, but to my astonishment I got no rise. I stepped a little farther and tried it again, with no better result. I was rather nonplussed at that, as I felt sure the pool must have some trout in it. Suddenly a slight splash sounded in my ear and some floating debris passed me. Wading out farther, I glanced around the boulder, and there sat an old grizzly, taking his morning bath and washing his face, just like folks. As he did not see me I retired gracefully, not wishing to disturb him. Having started out after trout I was not fishing for bear, and had no desire to change my original programme!

Just as I climbed out of the canyon I met my 2 friends coming to try the same pool, so I enjoined caution as to their manner of approach, lest the fish should see them, and told them I had seen a monster down there. I advised them to throw their lines around the boulder up stream. When they reached the pool they saw the water was disturbed and looked into the cause. Then they dropped their rods and fled. I was obliged to crawl down, recover the rods, and take them to camp, where I met at the hands of my friends a warm reception for generously giving up my chances at the pool for their benefit.

Alfred V. La Motte, Ukiah, Cal.

CONDEMNS DECOYS.

I have read your roasts of men who hunt with ferrets. I hunted with them 20 years ago, but have not since that time. I cannot see but that it is sport. The cottontail will hole after the sun is up, and the only way I could ever see one was to track it to the hole and then put in a ferret to drive the rabbit out. It was good sport to drop him at 40 or 50 yards.

I have hunted from Lake Ontario to the Pacific coast, and this fall was the first time I ever shot a duck over decoys. I said, "This is more like murder than like sport." I think the cottontail has a chance even with a ferret, and so have ducks. There are 10 or 12 of them, may be 20, and some of them get away. The sport a man can have hunting rats with ferrets should give him a place over the man who uses decoys. I know you cannot get many ducks without hard work unless you use them, but you can get one now and then. You may call me a game hog if you want to. I hope I am not one, but I think decoys do more harm than ferrets do. Rabbits can be caught with a snare, but I like to get them on the run.

I have not seen a ferret for 20 years, but I like to remember the sport of my boyhood days.

St. Joe, Adirondacks.

ANSWER.

No, I should not call you a game hog, by any means. The fact that you used ferrets 20 years ago is not to your discredit, for game was plentiful then, and scarcely any one thought of the necessity of preserving it. Consequently no one was then opposed to the use of ferrets, and thousands of men used them who would not do so to-day under any circumstances. The use of ferrets is condemned to-day, not by me alone, but by all decent sportsmen.

I wish the use of decoy ducks might also be discontinued everywhere, and that all sportsmen might look on that subject as you do. This will come about in time, but

such radical reforms must be effected slowly. Game of all kinds is disappearing so rapidly that sportsmen must consent to have their privileges curtailed in many ways, or make up their minds to lay away their guns forever, within a few years.—
EDITOR.

COON HUNTING ON PUGET SOUND.

D. W. ZUET.

Puget sound is probably the best place in the United States for this sport. The whole coast is covered by an immense forest which abounds with all kinds of game, and especially with coons, deer, bear, cougars and game birds.

Having received an invitation from friends to join them in a coon hunt, I got into my boat and pulled to their place, about 3 miles from where I was stopping, arriving there at 5 p. m. We were each armed with a small revolver, and a club about 4 feet long and $1\frac{1}{2}$ inches in diameter, these being the weapons used in coon hunting on the shores of Puget sound. Accompanied by 2 fine dogs we started from home about 7 o'clock, and reached the hunting grounds an hour later. The grounds were an unbroken chain of mussel and clam beds, extending several miles down the beach, where the coons came to feed on shell fish.

We had gone probably a mile down the beach when the dogs started a coon and treed him just in the edge of the woods. We followed, and being unable to see the coon it was decided I should climb the tree and knock him out. This was no easy job, as he had gone up a tree about 40 feet high and with few branches. I had to climb to the top, for he kept going up as I followed him. However, I soon reached him and with one blow from my club sent him whirling to the ground. He had no sooner hit the ground than one of the dogs caught him, and in a few seconds we had our first coon for the evening. Cutting his tail off as a trophy we proceeded on our way.

We had gone perhaps half a mile when the dogs started a bunch of 7 or 8. We caught 3 and killed them with our clubs as they were making for the woods. The dogs treed the others about 200 feet up on the bluff, in a small bunch of saplings. The bluff back of the beach at this place was about 300 feet high and almost perpendicular, with the bunch of saplings growing about $\frac{2}{3}$ of the way up. It was hard to get to them, but after several minutes of climbing we reached the spot, to find the coon up a tree 30 feet high, which stood slanting out over the bluff. It was a dangerous task to climb this tree, for if one should fall he would strike the beach below; so we drew lots to see who should

attempt it. It fell to my lot to climb the tree. Fastening my club on my back I undertook the task. When 10 feet from the coons I could go no farther, for I was getting light-headed, so after emptying my revolver at them and killing one I descended. Another of the boys volunteered to try it. He succeeded in getting close enough to knock the coons out of the tree with his club. The bluff was so steep we could not do much, but we succeeded in getting 2 of them. One of the dogs caught another. In the fight dog and coon lost their footing and rolled down the hill, never stopping until they reached the beach below. The dog was somewhat bruised by the fall, and the coon got away. This made 6 coons we had killed that evening. After cutting off their tails we went down the beach several miles, getting 4 more coons. When we finally concluded to turn back we were 12 miles from home.

ANOTHER FERRET BREEDER HEARD FROM.

In November RECREATION I saw your answer to a man who wanted to advertise ferrets. I think you were hasty in your reply. I have raised ferrets the last 10 years, and as yet have never been able to fill all my orders for stock. In looking over letters and inquiries I see that only about one out of every 10 wants them for rabbit hunting. The others bought them to drive out and kill rats, one of the worst enemies a farmer has to contend with. It is no worse for you to advertise ferrets than to advertise dogs that will point birds and so aid the sportsman in killing them; or to advertise a make of firearms, that will kill game half a mile away.

I am a lover of all kinds of sport, and heartily approve of your close attention to the game and your exposure of violators of the game laws; but I think you have done me as well as other ferret breeders an injustice. I hope you will correct it in your next issue. RECREATION is all right, but its editor is a little off sometimes, about certain things.

K. F., Warren, Minn.

ANSWER.

I regret it should have been necessary for me to say anything to injure you or any other honest reader of RECREATION. Yet I do find this necessary every day. I have lost many subscribers in the past 2 years on account of my crusade against the game hogs, but I shall keep it up until I get them all branded, if I lose every subscriber I have.

It is true some men use ferrets for hunting rats, and if their use could be confined to this I should never say a word against them; but I believe 10 rabbits are killed by each ferret, to one rat. I know a lot

of fellows who keep ferrets ostensibly for hunting rats, but who do little of that kind of hunting with them. On the contrary, these men sneak out and put the ferret into a rabbit burrow whenever and wherever they can find one. Many of them try to keep their dirty work secret; but they are not always successful. Murder will out, and this is the meanest and lowest of all kinds of murder.

Many men who use ferrets do not even give the rabbit a chance to run, and then shoot him as he goes. They hold a gunny sack over his burrow and let him run into this. Then they take him out and smash his head with a club. A man who would do this would steal chickens or horses if he were not afraid of being caught at it and sent to jail.

There is a wide difference between a man who puts a dog in the field for birds, and shoots them when they take to wing, and one who hunts rabbits with ferrets. Of all shooting done this way, it is safe to say 2/3 of the shots are misses, and the birds get safely away. What chance does the poor rabbit stand when a game hog sends a ferret into his den and holds a gunny sack over the other hole?

I trust that when you think of the matter in this light you will approve my answer to the Ohio ferret breeder, and that you may decide to quit the business.—
EDITOR.

LOOK OUT FOR THIS MAN.

A fur dealer and taxidermist in Salt Lake City, Utah, sends out a circular letter to hunters from which I quote:

We have had many inquiries as to possibility and safety of shipping game heads out of the State. Below we quote some remarks on the subject which may be found useful to uneasy parties. We wish to state, however, that up to this date not one shipment sent direct to us, or otherwise, has ever been stopped or brought trouble of any kind to shippers. Simply keep discreet. Do not advertise your business.

First, pack in tight box; second, forward by freight, classified as household goods or such; third, let not your name appear as shipper, use a fictitious one, so in case of possible trouble it cannot be traced back to you; fourth, be sure to prepay freight charges, otherwise the charges would have to be guaranteed by a responsible party and your identity thence known; fifth, our name and business being in general familiar to railroad agents and others, address the box to some fictitious name (John F. Simpson, or such, Salt Lake City,) but *be sure to mail* us at once the bill of lading or receipt to identify and enable the man we send to claim shipment as the proper party to deliver to. Also state in your letter to whom and where to send remittances.

(Hundreds of choice game heads of all kinds, when once shot, are permitted to spoil continually. A golden harvest can be earned without hurt or detriment to anyone or thing.)

Here is a case that requires careful watching on the part of game wardens, express agents and others. I have placed this matter in the hands of the Hon. John Sharp, Chief Warden of the Utah division of the L. A. S., and have requested him to take energetic measures to apprehend

this man and to require him to answer before the courts for thus advising people to violate the law. It is likely this man will soon have cause to regret his brazen attempt, not only to break the law but to induce others to do so.

I trust every friend of game protection in Utah, Nevada, California and Colorado especially will watch this man and do everything possible to catch him or any of his dupes.

I have written him as follows:

Dear Sir: An officer of the United States Government, who has recently received a package of circulars from you, sends them to me, and requests me as president of the League of American Sportsmen to take measures to apprehend you and to have you punished for your brazen and reprehensible efforts to violate the game laws, and induce others to do so. I am astonished to learn that any business man of the prominence to which you aspire would be guilty of such conduct. I have placed the matter in the hands of the Postmaster General of the United States, and have requested him to take such action in the matter as he may deem proper. I think you will find that in using the United States mails in this way you have placed yourself liable to spend some months and possibly some years behind the bars.

Furthermore, I have instructed the Chief Warden of the Utah Division of the L. A. S. to watch you and your agents, and to secure such evidence against you or them as may be possible. I hope he may soon succeed in bringing you before your local courts to answer for your conduct.

CHICKEN SHOOTING IN MINNESOTA.

W. W. M'MILLAN.

There were 3 of us—Evans, Bill, the hired man, and I. By 2 o'clock in the afternoon one day in September, 1894, we were well on our way for a hunt. The dogs were soon far in advance, Sam, the pointer, apparently running about aimlessly, while Flora, Evans' setter, occasionally gave Sam's field a cursory examination, as if to ascertain whether or not the younger dog was competent to maintain his rapid course.

We were not the only hunters abroad that beautiful autumn afternoon. The shots of at least a dozen enterprising Nimrods greeted us from all sides as we hastened along. Our course led us directly to the lower corner of an old barley field. Bill had told us we would find birds in that vicinity. The dogs were gradually approaching us, Flora carefully covering all her own territory and a large part of Sam's, while Sam unconcernedly ranged

about as though chickens were far from his thoughts. Just then a shout from Bill called attention to Sam, who had come to a most beautiful point. A second later Flora, almost at Evans' feet, confirmed the fact that we were in the midst of a covey. Flora's bird raised first, followed almost instantly by 3 from under Sam's nose. All 3 of these dropped, but Evans, in some inexplicable manner, missed his bird with both barrels. My second barrel brought down the fourth bird, which proved to be an old cock, probably the patriarch of the covey.

Evans' next attempt was better. He missed one and hit another at long range. Bill, in the meantime, had shot 2 birds. One more shot all around netted 2 to Bill and one to me. Then the whole covey rose, finding us with smoking guns. Clearly Bill had that day shown us 3 things we had long doubted: First, that he was an old hunter; second, that Sam was no slouch; and last, that the covey was a dead certainty.

The covey took its course toward a neighboring field, scattering as it settled over an area of about 10 acres. After that every chicken that was raised had almost to be poked out of the grass with the barrel of the gun. The frightened birds simply would not fly. This robbed us of a great deal of sport, although it probably saved the lives of several of those birds, for, in our magnanimity, we often recklessly gave them more than a fair start, and, consequently, often missed.

The covey, as far as we were able to judge, contained about 45 birds. Thirty-two left the field for the dinner table, 18 having fallen to Bill, 6 to Evans and 8 to me.

DEER HUNTING FATALITIES.

Thirty-nine persons are known to have met death in 3 States during the last deer hunting season. In most instances the fatalities were due to hunters mistaking human beings for deer or bear. It is said 23 persons were killed in the Adirondacks in as many days. Nine were killed in Michigan, and 7 in Wisconsin. Eighteen persons were wounded by hunters in Northern Michigan, and several of these subsequently died. In 4 instances the men wounded by hunters were abandoned by the latter in a most cowardly manner, and left to bleed to death, when they might have recovered if those who shot them had stopped and rendered aid.

Following is a list of those killed in Wisconsin and Michigan:

IN WISCONSIN.

Albaugh, Stephen, of Cincinnati, Ohio, aged 71; mistaken by hunter for bear.

Artz, John, farmer, Flambeau, Wis.; shot by deer hunter.

Holcomb, H., age 40, farmer; shot near West Superior by hunter who mistook him for deer.

Parks, J., age 49, carpenter; struck by stray bullet, while working on a house near Mellen, Wis.

Strayer, George, age 14; shot by companion while hunting near Ashland.

Trobridge, Edward, Medford, Wis.; shot by deer hunter.

Winters, Thomas, farmer, Neillsville, Wis.; shot by deer hunter.

IN MICHIGAN.

Anderson, Ernst, age 17, Republic; shot by companion, who mistook him for a deer.

Boekeloo, Otto, age 40, Kalamazoo; stray bullet from hunter's rifle.

Christensen, Martin, age 37, Escanaba; found dead in woods; thought to have been shot by hunter.

Lewis, Frank M., age 35, Pigeon river; shot by unknown hunter.

Mathewson, Wesley, age 24, Durand; shot by hunting companion.

Snap, George, age 27, Bancroft; shot by unknown hunter.

Newman, Miss Lois, South Olive; shot by brother, while on hunting expedition.

Thompson, Ellis, Jasper; shot by unknown hunter.

Twenty-five persons in Wisconsin and Michigan met death through their own carelessness in handling firearms while hunting, and the number of such accidents is also reported to have been greater this year than before.

The mystery of all this is that the man who cannot hit a deer, even if he shoots at a whole herd, never fails to bag his partner when he mistakes him for a deer.

HUNTING ON SUNDAY.

New York City.

Editor RECREATION: The letter from Sheboygan, Wis., questioning the justice of laws which bar a working man from all shooting by forbidding hunting on Sunday, is opportune and not without provocation. Your correspondent, however, while seemingly an intelligent man, forgets the real purpose of laws. They are created not for any one class but for the good of all. It is true many are able to enjoy more privileges than others. This, however, is not in consequence of game laws nor class legislation. It is merely the outgrowth of conditions that have characterized all civil life and invaded the very domain of the aborigine. I pity your contributor, but has he considered that he is not the only poor man in the vicinity of

Sheboygan who could, and would like to, make a few dollars out of his Sunday hunting? If the laws were changed for his benefit, would he be the only one to take advantage of the opportunity? Assuredly not; there would be many others. Game does not belong of right to whoever can take it; it is the property of the State, which, in an endeavor to prevent its extermination, prescribes the times and conditions under which it may be taken. Those unable to hunt on week days may be unfortunate; but they have no cause to cavil at a law made not to oppress a class nor even to honor Sunday, but simply to give the game one day of safety each week. It may soften the complainant's feeling to know I am not a capitalist, but a poor devil hanging over a desk many long hours a day; yet even at that I get some hunting and don't do it on Sunday either. I get up occasionally at 3 a. m. and sneak off to the woods; and by 8 o'clock I am behind my desk.

Buckskin George.

THE RIGHT GOSPEL.

Christ Church Cathedral, Louisville, Ky., issues every week for distribution to the congregation a little newspaper called "Cathedral Notes." The Rev. George G. Smith is the editor, and many bright things of a non-religious or semi-religious nature are said. Mr. Smith was away, and the Dean of the Cathedral, the Rev. Charles E. Craik, took a whirl in the editorial chair. Among other items of a non-sectarian nature appeared the following:

The Dean again takes advantage of the absence of the editor to make a note on what might be called a purely secular matter. Perhaps some may think it entirely too light and undignified to find a place in our paper; but the Dean, being a hunter of birds as well as of men, is interested in the enforcement of our game laws, and he fears there are many in his congregation who, ignorantly, are in danger of violating those laws. He would regret if any of the fair women of his congregation should be indicted for serving quail out of season. In that case it would not be looked on as a trivial matter at all. It might be undignified, but still serious.

So he would remind them that it is strictly unlawful to kill, to buy, to sell or to have in possession any quail between the first day of January and the 15th of November. If well-to-do people did not offer to buy birds out of season, our caterers would not be tempted to sell them. Thus we become guilty of a double wrong in tempting others. This would certainly bring the matter under the head of morals, to discuss which is evidently in the strict line of duty of Cathedral Notes. Let us give our moral support to the young men who voluntarily undertake an unpleasant duty.

Here is a clergyman after my own heart. Why don't all ministers of the Gospel preach such morality? How different the place Mr. Craik will get in the hereafter from that to which "Chaplain" Hadley, of Fort Yates, N. D., will be assigned—he who with a friend recently killed over 75 ducks and winged 20 more, at one rake!—

EDITOR.

A SHOT BETWEEN THE EYES.

How many of RECREATION's readers have shot a bear squarely between the eyes, with a black powder gun, at the first crack, without having the ball glance? I recently succeeded in doing this. I have a .38-55 single shot Winchester, with Lyman front and rear sight. It is a fine shooter. The weather was stormy, with about 2 inches of snow on the hill. Two boys had seen a bear track in the snow the day before, so I knew where to strike his trail. I had tracked him about 2 miles when he went into a tamarack swamp. I had no dog, so had to play dog myself. It was no trouble to track the bear in the snow, but it was hard to get sight of him in the bushes. About 2 o'clock I caught sight of him. He had climbed on to some fallen trees, to get a better view of what was following him. I was only about 20 paces away. Could only see his head, so I took a good bead and let drive. Mr. Bear fell about 6 feet, to the ground, like a sack of wheat. The ball struck him squarely between the eyes and came out on top of his neck. This was one bullet that did not glance from a bear's face.*

The season for deer opened here October 15th. Thus far there have been few killed except by the Indians. They are death to the game in this country, at all seasons. Prairie chickens and grouse are plentiful. I have just got a .30-30 Winchester, which I am anxious to give a trial and compare with my .38-55. The difference in weight is in its favor, but I don't see how it can kill a bear any deader than my .38-55 did.

J. B. L., Clover, Wash.

A SOCIABLE BEAR.

Out on Canyon creek, not far from Dawson, Yukon Territory, one of the miners, in the fall of 1898, killed a moose, which was sold to the various miners. They hung the meat in their cabins for future use. Not long after, one of the miners, who had a log cabin with a canvas door, was awakened one night by some animal which was trying to get into the cabin. The miner supposed it was a donkey, belonging to a man lower down on the creek. He arose, went to the front of the cabin, raised the canvas and found his visitor was a brown Alaska bear. Having his right of way disputed, the bear left the cabin, went to the next place below, got on the roof of that cabin and began to dig out the poles, to get at the moose meat inside. The scared miner, hearing the noise above

*I doubt if any ball, fired from a modern rifle, and propelled by a full charge of powder, ever glanced from a bear's skull. Most, if not all the stories we read, of this kind, are pure inventions, and generally originate in the mind of some newspaper reporter.—EDITOR.

him, set up a yell, which caused the sociable bear to clear out.

The next night the same bear, it is supposed, entered a tent below, on the same creek, where a prospector was sleeping, having piled his possessions back of his bed in the tent. The bear placed one paw on the sleeping man, reached over him, took a side of bacon, and made for the open air. The miner, awakened by the unusual pressure on his chest and realizing it was no ordinary nightmare, sprang up, ran out of the tent with his rifle, and was lucky enough to break the bear's back with the first shot from his old reliable .45-70 rifle.

B. F. Clayton, Portland, Oregon.

FATE OF A NON-COMBATANT.

Recently while descending the Rio Grande, on the river gunboat Covadonga, the lookout sighted a great, dark object on the shore. Lieutenant Webb, the commander, examined it with his glass, and saw it was an immense crocodile. The lieutenant ordered out a firing squad with "Kraggs." The entire crew and all the newspaper men were on deck to see the fun. At a signal the squad fired a volley. The crocodile went straight up and seemed to stand on the very end of his tail, with feet extended and mouth open. Another volley brought him to his feet as well as to his senses, and he fairly split the air in getting to the river. We thought we had lost him; but Lieutenant Webb gave him a turn or 2 from a Gatling, and the great saurian stopped so short that he drove his nose and feet deep into the mud. A boat's crew landed to look at him, and concluded to take him to Manila. They tied a rope around his head, but the entire crew could not budge him. Then the rope was attached to the Covadonga's winch, and he was dragged aboard. This crocodile was 20 feet long; I don't know what he weighed. The natives said he was over 100 years old. The Utah Battery boys will take the skin home as a trophy of the war.

Lieut. C. F. O'Keefe, Manila, P. I.

A CONGRESS FOR PROTECTION.

Why not call a congress of nations to protect all big game? In Africa many varieties of large and beautiful animals, of value to the whole world, are rapidly following the American bison to the happy hunting grounds, where the game hog is not admitted. It is a crime to exterminate these creatures, but the fate of the great auk and the dodo will soon be theirs unless we wake up and save them in time. With slight encouragement the valuable

animals of Africa, India and America would increase and form a source of wealth and pride to the people who now think only of destroying them. Most of the African antelopes would thrive in South America, and some would no doubt do well in the Southwestern part of the United States. An international congress of scientists and sportsmen would be a great step toward preserving the remaining passengers of Noah's ark. Start the movement in RECREATION.

Dan. Beard, Flushing, L. I.

An excellent suggestion and one I should like to see put in operation. Let us hear from nature lovers on this subject.
—EDITOR.

ANOTHER FAKE HEAD.

In August RECREATION, which contains an account of a fake elk head sold by Wittich, of Livingston, Mont., is a letter from A. H. Paton, of Meeker, Col., describing another large elk head. Both heads, I fancy, are of the same kind. Some time ago I had an order for an extra big elk head, and having heard Paton had one, I wrote to him. He replied he had sold it to Mr. Ball, proprietor of Ball's hotel, Meeker. I ordered the head and looked at it as it passed through here on the car. I mistrusted its genuineness and wrote to Paton and to Ball about it. Both assured me it was all right, and I thought no more of it until I heard from the buyer. The latter wanted only the horns, and employed a taxidermist to remove them from the head and mount them on a shield. He found the head had been made up and the horns spliced.

Gus Stainsky, Colorado Springs, Col.

GIVE THE FARMER CREDIT.

In reading October RECREATION I notice J. W. Griggs tries to throw the blame of the decrease in game on the farmer. He claims the farmer has the game all killed before the season opens. I do not agree with him. In the first place, the farmer has no time to hunt before that date, or for a month after. Secondly, farmers furnish food for the birds and often protect the nests. Did Mr. Griggs ever see a farmer shoot a quail from a fence post, in the breeding and hatching season? I think Mr. Griggs will find, provided he looks, that a certain class from the towns or cities make a business of going out 2 to 7 times a week and shooting everything they find, in season or out. They kill much more game than the farmers do.

R. W. R., Alberton, Ia.

GAME NOTES.

I have just returned to this city after a 10 day trip over in the Eastern shore marshes. We found sora in abundance; also a few woodducks. I had an opportunity to indulge in that most fascinating sport, coon hunting. We were abundantly successful, having good dogs, and companions of unquestioned staying powers.

I regret to state that one of these met with an unfortunate accident the last night, out, as you see by the enclosed clipping:

Last night Benjamin Townsend, of Centralville; J. E. Tylor, of Baltimore, and J. H. Greenhawk, of Easton, went coon hunting in Herland wood, near Easton. The dogs found a coon in a tree, which Mr. Townsend ascended, dislodging 6 coons. They were making a terrific battle on the ground with the 6 dogs, and in Mr. Townsend's anxiety to be with them, he forgot his caution in descending the tree and fell 50 feet to the ground. His companions improvised a stretcher and brought him home. He is seriously hurt, and while conscious is unable to move.

J. E. Tylor, Baltimore, Md.

Please find enclosed check for \$2.10 to pay for one year's subscription to dear old RECREATION and to enlist my name in the Abou of societies—the League of American Sportsmen. You can credit this second dollar to your answer to the Ohio ferret raiser, in November RECREATION. That must have been a .32-40 crack, for it punctured the ferret's eye.

An old boar and a shoat have been camping at the Big Seneca dam, near here, 2 weeks, and have been slaughtering ducks in a shameful manner. On Friday they butchered 29 ducks and one goose in time to take an afternoon train to Washington to sell them. Train your .32-40 on them.

R. W. Stout, Poolesville, Md.

In November 6 of us, including cook, with 2 wagons, guns and ammunition, tents, grub and 6 of my pack of fox hounds, started for a 20 days' deer hunt diversified with quail shooting, peccary shooting, and chasing of wildcats and Mexican lions, with an occasional raccoon for spice, beside giving a little attention to the wary coyote. Fortune was against us. The weather was so warm the rattlesnakes were out. We killed 3 of them. We found deer, in fine condition, but we could not keep any meat because of the weather; so we killed but 3 deer, for our own use in camp, a few javalinas for the dogs, and 6 coyotes, which we found mangy.

L. L. Goodrich, San Antonio, Texas.

I recently arrested Richard and Charles Parker for hunting and shooting on Sunday, and brought them before Justice G. W. Gleason, of Susquehanna. After hearing the evidence and arguments of both

sides Charles was discharged, as the defence claimed the action should have been brought within 72 hours, while this action was brought 8 or 10 days after the offense was committed. When our attorney looked up the later law he found that the 72 hours' clause had been repealed and that both men should have been held. The justice also admitted this.

Geo. E. Porter, Constable,
Lanesboro, Pa.

Last fall when I was hunting in the Southwestern part of the Adirondacks, I found men were running deer with dogs, in open violation of the law. Coming down from Piseco to Arietta we heard the hounds all along in the mountains. At Stink lake we saw a hound put a deer in the water. There were gunners in plenty to murder the poor little thing in cold blood. At Pine lake there are a number of camps. Gus Avery, who lives about 8 miles South of Piseco, keeps 7 or 8 dogs and runs them on every opportunity.

R. H. Johnson, Rockton, N. Y.

Roselle, N. J., Oct. 24.—Gabriel Morino and son Antonio, of Brooklyn, were arrested at this place yesterday by Game Warden Hawkins and Constable Bonnell, for shooting song birds. Eight birds were found in their possession. When arrested both showed fight and leveled guns at the officers, who, after a parley, compelled them to surrender at the muzzle of a revolver.

Both were taken before Judge Woodruff and fined \$20 for each bird. They did not have so much money, and were therefore taken to the county jail at Elizabeth and locked up.—*Newark Daily Advertiser*.

Good! If all Jersey game wardens would deal with these Dagos as Tooker did with his they might in time learn to obey the laws.—EDITOR.

Two friends and I have a camp which we have named Recreation. It is not in a big game country, but we spend many happy days there during the open season on grouse and rabbits. We read RECREATION with great pleasure, and every issue goes straight to camp, so now we have 2 or 3 dozen copies there that have been read time and again.

Elbert Hubbard, Jr., East Aurora, N. Y.

Mr. Hubbard is the son of Elbert Hubbard, editor and publisher of The Philistine, the next best magazine.—EDITOR.

Lum Howell and Ed Wesser claim the hunter's belt for their prowess. Thursday at Montau lake they brought down 100 wild ducks. They returned home yesterday with 70 in their hunting pouches.

Your card received. We killed 100 ducks in 8 hours at Lake Montau, Rochester, Ind. There were only 2 of us, Edward Wesser and myself.

Lum Howell, Kokomo, Ind.

And I wish the sheriff might take

you and Ed and put you where you and all your breed belong.—EDITOR.

A Scranton, Pa., paper says Reigel Ott, L. P. Jones, O. P. Jones and Thomas Lockard, who claim to be "sportsmen," were each fined \$25 and costs for catching 5 rabbits with the aid of a ferret. Fortunately, the use of these little pests is prohibited by the laws of Pennsylvania, and it is also fortunate that detective Ross and justice Robert Gruber, of Bangor, should have gotten hold of the offenders. I wish these same officers could get their clutches on every man in the State of Pennsylvania who puts a ferret into a rabbit burrow.

There are 500 or 600 deer in less than 2 miles of my cabin this winter, and half as many coyotes, for which the poor deer have to furnish feed. I find 4 or 5 dead deer every week that have been killed by them, and it is not likely I find one in 4.

The coyotes get all they want to eat and so will not take poison. One half-eaten carcass lies within 500 yards of my cabin and they do not come near it any more. It has not been poisoned, but I went past it and that keeps them away.

Game is not plentiful here at present, as people hunt the year round. There are a few rabbits, some quails and occasionally a woodcock. We have pot hunters here, not sportsmen. They do not read RECREATION or they would know better. Give it to the game hogs straight from the shoulder. It is pleasing to think the herd is growing smaller, and in a few years will be extinct.

David Shafer, West Carrollton, O.

Has anyone a more useful dog than mine? She is a little over a year old, is part rat terrier, part spaniel, and can tackle a rabbit or point a bird to perfection. She will fetch any game, on land or in water, and can do 12 or 15 tricks. She can also detect the least strange sound around the house at night, and will bark loudly until she is quieted. A dog seldom has all these accomplishments.

H. E. Graff, Lyons, N. Y.

A flock of about 200 wild pigeons recently passed directly over Willowemoc. We have had the largest crop of beech nuts we have had in 25 years. Ruffed grouse are on the increase, thanks to the game laws. Lewie Henry, of De Bruce, captured a large live crane with his hands last night. It was in the thick brush and could not rise.

R. D., Willowemoc, N. Y.

On July 16th I drove from Graceville to

Dumont, a distance of about 15 miles, and saw from 40 to 50 wild pigeons, all along the road in 2s and 4s. In one place I saw a bunch of about 10. I noticed a flock of about 16 or 17 about 2 weeks previous, scratching around an old straw pile. My cousin, Joseph Redding, was with me on both occasions.

J. P. Redding, Dumont, Minn.

Wild water fowl of all kinds are arriving here in great numbers from the North. The lagoons near the city are covered with ducks. On their muddy banks thousands of snipe and sandpipers are found. In the swamps, rails and all species of gallinules abound.

O. A. Fischer, Trinidad, Cuba.

Bert Hamlin, of Orneville, Me., was recently fined \$500 for killing a moose in close season. That is a big price for moose, but they come high in that country when killed out of the legal hunting season. Bertie, old boy, you must watch the calendar when you go after moose.

A Munson Typewriter, listed at \$100. for 75 yearly subscriptions to RECREATION. This is one of the high grade standard machines, and does just as good work as the Remington or the Smith Premier. A rare opportunity. Don't miss it.

Several hundred quails were liberated about here and they have increased wonderfully. I saw numerous coveys of young birds a short time ago while I was out for squirrels.

R. E. Borhek, West Bethlehem, Pa.

We have a few red squirrels, rabbits, foxes, gophers and prairie chickens and thousands of sparrows. We have also a few robins and other song birds.

E. H. Wells, Grand Forks, N. Dak.

Quails and ruffed grouse are more numerous here than in any previous season for the past 5 years.

Thomas Harris, Pt. Jervis, N. Y.

There are mountain sheep and moose not far from here, and excellent trout fishing near.

L. L. Bales, Haines Mission, Alaska.

Keep up your good work on the game hogs and game will again become plentiful.

R. E. Goodrich, Fredericksburg, Va.

I would like to learn through RECREATION how to trap or catch snakes.

F. E. Edmands, Springfield, Ill.

FISH AND FISHING.

HOW GOOD RODS ARE MADE.

ROBERT L. ARMIT.

I note, with great interest, the articles in *RECREATION* for and against the steel rod, and it may interest some of your readers to know that a few years ago exhaustive experiments were made in England, by an eminent engineer, on rods of different construction and material. Deflection, resilience, number of vibrations before coming to rest, with various weights, as well as specific gravity and breaking weight, were all duly considered. The specimens tested were: Double built split cane, with steel center (hexagonal); double built split cane (hexagonal); single built split cane, with steel center (hexagonal); single built split cane; greenheart and cane built; greenheart built; hickory built; solid greenheart, round; lancewood; hollow steel.

All these specimens were manufactured by one of the best rod makers in England, for whom the report in question was made.

I will not go into technical details beyond saying that the specimen sections used were all 24 inches long and 32-100 of an inch in diameter, for the round rods; the sides of each triangular section of the hexagonal rods measuring 16-100 of an inch. The length of the portion of the rod extending beyond the vice was styled the length used. The steel center is about the size of a good sized knitting needle and is tapered.

The best results were obtained by the double built split cane with steel center, closely followed by the double built, single built with steel center, and single built split cane.

A leading authority on modern fly fishing, in summing up the results of these tests, writes: "It may be taken as proven that built cane is the best material known, and that there is considerable difference of opinion as to the policy of working a steel center through the rod."

Great consideration must be given to the number of vibrations before coming to rest. The less the number of vibrations the greater the resilience, a quality essential to all fly rods, whether salmon or trout. Could a perfect vacuum be procured, technically speaking, the steel rod would continue to vibrate *ad infinitum*.

The steel rod should be indispensable on a prospecting tour, or on any other rough trip where an angler would not wish to risk an expensive split bamboo rod. I certainly agree with Mack W. when he says, "I consider the steel rod far superior to the average split bamboo rod," but the

average split bamboo rod is sawed, not split, the bark (the strongest part of the cane) is often planed off, and both the glue and the varnish are rubbish. When one takes into consideration the great amount of labor and expense involved in the manufacture of the first-class article, viz., selecting the cane, of which more than one-half is useless for rod making, and splitting and fitting the same; the gluing, which takes some months, as the glue in the interior takes a long time to become thoroughly hard and dry; then the balancing, and finally the winding and varnishing, it will be clearly seen that a first-class rod, even under the most favorable circumstances, must be a very expensive article. It must cost \$20 to \$30. However, it is safe to say that one of these, if properly cared for, will last a lifetime and handle anything within reason.

Mack W.'s comparisons, while amusing, are of hardly any value, practical or technical. We see him handling salmon trout with a steel rod, and Mr. Warner catching "mummychogs" with a split bamboo, to us of unknown make; verily a striking example of the great capacity of individuals to differentiate. Surely a just comparison of 2 different rods must in no way be dependent on a personal factor in the equation. Mack W. may be a far better angler than Mr. Warner; in which case it is fair to assume that, were he to use a split bamboo, of standard make, and Mr. Warner a hollow steel rod, he would continue to hook and land salmon trout to Mr. Warner's "mummychogs."

Personally, I consider the orthodox pattern of the split bamboo rod too supple; in fact, uselessly so. However, I offer my opinion with the greatest diffidence.

The modern school of fly fishermen, especially those who fish with the dry fly, seem to favor the use of the double tapered line, very fine at the ends and quite thick in the middle. These lines, of course, require a somewhat stiffer rod than the ordinary, and with more lifting power in them. However, a good performer can cover a rising fish at 15 to 25 yards and cast into the teeth of any wind short of a gale. These things are impossible with an ordinary rod, and are great advantages, especially when fishing clear, slow running streams in which the trout are shy and where keeping out of sight is so essential to success.

Rod makers should consult those of their customers who are good practical anglers as to the best style of fly rod, instead of making what they consider the correct style, regardless of the test of actual experience.

TROUT FISHING UNDER DIFFICULTIES.

A. S. ALLEN.

One day in June Mr. Retsof, Dr. Blank, Mr. Carter and I, with the 10 year old son of the doctor, whom we called Dr. Junior, took the B. & A. train for South Twin lake. There a small steamer was to take us up South and North Twin lakes, through the thoroughfare connecting with Pemadumcook lake, to the head of Pemadumcook, some 15 or 20 miles. Thence we were to cross the carry about 2 miles to the camps on Debsconeag lake, where we were to make our headquarters, fish a day or 2, and return.

It was the log driving season and a number of lumbermen and river drivers were aboard the train. We were nearing the end of our railroad journey when one of them told us the thoroughfare was jammed with logs, and that it was likely to stay so 10 days, or might break up at any moment, but that if it did, it might fill again at once. He said if we were prepared to stay up there 2 or 3 weeks we would be all right, provided we could get through, but that otherwise we would better not try it. If we should get through, we might be unable to get back, as there was a dense forest all around, and any other way of travel than by boat was out of the question.

We held a hurried consultation and decided not to stop at South Twin house, but to go to Norcross, a mile farther, and then to replan our trip. After supper at the Norcross hotel, Dr. Blank suggested that we go to Outlet dam, Moosehead lake, where he assured us the fishing was magnificent. We decided to try it. To that end we returned to Brownville on a freight train, stayed there the remainder of the night, took the Iron Works train in the morning to Brownville Junction, and went to Moosehead on the Canadian Pacific.

We had a 40-mile ride on a mixed train to Moosehead, over the C. P. R., but it was through an exceedingly picturesque region, abounding with lakes, streams, hills and forests. We made the trip in about 4 hours, and at noon, after being 20 hours from home, we were in sight of our destination. Is it not strange what inconvenience people will endure when on pleasure bent?

Moosehead Station is at the outlet of the lake into the Kennebec river. Wilson's hotel stands on a point of land between the lake and the river, and Mr. Wilson has a little old saw mill on the end of the point where the dam commences. We were to fish from the dam on the lower side. After hastily swallowing our dinner, we adjusted our tackle and started for the dam. It is a perfect spot. The piers are about 20 feet square, and 20 to 40 feet apart, hewed

logs being laid across the top to walk on. The trout could be seen flitting about in the eddies on the lower side of the piers, and in those spots we cautiously and quietly angled for them with bait, or cast for them with flies. It was not only my first fly fishing, but my first trout fishing. It was also Dr. Junior's first experience, and, while he is a boy of 10, he took no back seat, but became quite adept with the rod and reel. Quiet, careful, alert when he felt a strike, he soon distanced some others of the party in the number of trout he lured from the sparkling water.

We remained at Moosehead until noon the next day, when it commenced to rain heavily and we went to Greenville, to take the B. & A. train home. Our train was late on account of the storm and we had to stay at Greenville all night. It had stopped raining, and Dr. Blank suggested a deep water try for togue. We got a guide and went out. Dr. Junior had a strike, but lost him. The guide got one togue, which weighed 3 pounds, and I caught a square tailed trout which weighed about a pound and a half. Altogether the 3 of us had perhaps 40 pounds of fish, and as we are all men with families we could use all we caught.

We did not regret our replanned trip; and when, after a comfortable night at the famous Moosehead inn, we were speeding down the line toward home, we vowed that when the first of June came around again we would hie ourselves to the Moosehead, fish where we could be in sight of the railroad station, and where we could leave for home at any time if necessary.

TROUT FISHING IN THE SALMON RIVER.

S. ALMON TROUT.

One summer afternoon Bill Bliss, Dick Haynes, myself and a fourth, whom we eventually named "Asinine Artie," started for a fishing trip. A freight train took us from Malone to Mountain View, in the Adirondacks, and a little steamer from there up the outlet $\frac{1}{2}$ mile to Morgan's hotel, a comfortable and pretty log structure with summer boarders and excellent meals.

In the morning the weather was fair and beautiful. We got 2 flat bottomed boats and made ready for our start up the Salmon river. The way there is fearful and wonderful, and the river winds tortuously. It is so narrow we had to paddle in single file. Then came the strange spectacle of one boat proceeding up the stream and meeting the other, across an intervening patch of brake and brushwood, apparently going down. Many times one of the boats stuck on sunken logs and the other had to go to its assistance. Our pipes were brushed from our mouths by branches and

our hats manifested a sociability with the water that was distressing. We had to get out and lift the boats over logs; and more than once we were at a loss to tell where the channel of the stream was.

Our first cast was made by the side of a huge log, a mile up. Bliss threw in, his reel went singing and he landed a good sized, wriggling trout with but brief delay. We were all busy then for a time except Artie. He had insisted on taking a common rod, and had as bait a can of angle worms! The trout refused to be enticed by such vulgarities, and Artie caught nothing but branches and things. This he did with great gusto, and Bliss inquired if it would not be well for us to embark in the lumbering business. But Artie didn't hear him, and continued to cast for snags with maddening persistence. Finally in his zeal he leaned too far out, lost his balance, and shot head foremost into the water. We laid hands on him as he came up, blowing, assured him, in answer to his frenzied yells, that there was no danger of his drowning, and urged him to stand upright. He tremblingly undid his knees from under his chin and found he was in 4 feet of water.

We did not need to move for some time, as the trout were biting well, but finally we paddled up stream, stopping at several places. We got a large number of trout, mostly little fellows. Noon arrived, and we ate our lunch in a picturesque spot on a sloping bank.

On our return down the stream we finally landed at our old stopping place and all cast in, Artie with the rest, missing a neighboring tree by a hair. Suddenly he gave a wild screech. His bamboo rod bent double as he surged back on it and lifted clear of the water something that looked to my excited eyes like a whale. He held it there, stupidly blinking at it with open mouth, while it wriggled sinuously and thrashed its powerful tail.

"Pull him in, man!" I yelled, and Artie, still gasping, managed to do so, the fish falling from the hook just as Artie got him over the side of the boat. I fell on him and soon had him quiet. It was a trout $16\frac{1}{4}$ inches long that afterward weighed $2\frac{3}{4}$ pounds.

At first none of us could speak.

"Well of all the bull-headed luck!" finally ejaculated Bliss, staring blankly at the prize.

"And to be caught by that!" wonderingly remarked Dick, staring at the hero. Artie said nothing, but grinned apishly. We paddled back in silence and pondered.

We couldn't get Artie out the next day. We felt a superstitious awe of him and wanted him for a mascot, but we had to go

without him, and we caught a pitiful half dozen. The next day we returned home.

WHY ARE THE BASS GONE?

A number of years ago I was stationed in Wittenberg, Perry county, Mo., on the Mississippi river. Several creeks empty into the river near the town, and at the time I mention they afforded good fishing for bass and crappie. It was no trick to take a large string of bass from those waters. They would average 2 to 3 pounds, and one of 5 pounds or more was generally among them. I rarely used natural bait, taking them chiefly on flies and small spoons. When the summer vacation of '99 came around and the annual fishing trip was due, I decided to look up my former stamping-ground. The town and vicinity had changed but little, and I started out to try my luck. Up the creek to my favorite pool I hurried, weather and condition of water being as favorable as could be desired. My first cast was answered by a strike, but experience told me it was no bass I had hooked. It proved to be a 2-pound hickory shad. After that I hooked several more of the same species, a few cats, and capped the climax with a large gar. Greatly disappointed, I tried other pools that had yielded well in former years, but the result was the same—strikes galore, but no bass or crappie. I returned with empty creel, and resolved to try the other creeks. There was one, especially, which had never formerly disappointed me. Bass could always be had for the asking, and besides it had yielded rock bass, goggle-eyes and large sunfish. I know that David Starr Jordan in "American Game Fishes" ranks these latter as "boy fishes," but I have always been fond of angling for them with a light rod and trout flies. But, alas, my experience in that creek was only another disappointment. Not only were the bass gone, but all their allies. The riffles, that in former years had swarmed with the aforesaid boy fishes, yielded only the smaller kinds of catfish, while the deep pools, once the hiding places of big bass, were occupied by hickory shad, larger catfish or, most disgusting of all, a fish I had never seen in former years, called by the natives jack, or dog, fish.

I inquired everywhere how this change had been brought about, but could reach no satisfactory conclusion. The waters are ideal bass streams. Rock and gravel form the beds; springs are numerous along the banks; the creeks flow through an almost unbroken forest; there are no factories, nor even sawmills, along the streams; the creeks were not overfished. There may be, according to rumors, some seining done, but if so, it is only in certain localities. Most of the inhabitants respect

the laws, and if they fish at all, prefer a 20-pound cat out of the river to all the bass in the creeks. Can any brother in the gentle art explain these conditions?

H. J. F., Fort Wayne, Ind.

SOME LARGE SMALL MOUTHS.

While not prepared to declare as a record breaker the 7 pound 6 ounce small mouth black bass mentioned by Dr. S. in December RECREATION, I can give the biography of a pet bass, of that variety, which for 9 years responded to the name of Dick, and had evidently reached his majority so far as weight was concerned. When Dick was 4 inches long he was taken from his natural element and put into a large spring curb, in connection with a cheese factory. He soon demonstrated the wisdom of his captor, by depleting the ranks of the water bug, the purpose for which he was taken. At the approach of winter a number of brook minnows were put into the spring for his winter food. His summer food consisted principally of cheese curd, which he relished to such an extent that he was ever aldermanic in proportions. When he was a year old he weighed less than a pound; at 2 years he weighed 2 pounds; and he gained a pound each year until he was 7 years old, after which he did not gain an ounce. When he was 9 years old the factory changed hands and poor Dick usurped the place of the traditional roast at Thanksgiving. Although shy with strangers, he readily responded to a call from those about the place, would take food from the fingers, and did not seriously object to being handled except at weighing time when he was taken from the water.

It is pathetic to note that at the dinner at which Dick was served the old gentleman who had raised and petted him did not eat of the fish. When asked why he said, "I couldn't do it, boys. He was my pet. I couldn't do it no how."

C. C. Bartlett, Iowa Falls, Ia.

MORE RECORD SMALL MOUTH BASS.

Referring to the inquiry of Dr. S., in December RECREATION: Two guests at Silver Bay last August caught, in Lake George, 3 small mouth black bass, weighing respectively $5\frac{1}{4}$, $6\frac{1}{4}$ and $7\frac{1}{4}$ pounds, the weight being taken several hours after catching. The same question raised by Dr. S. was asked by them, "Was not this catch a 'record breaker'?" I referred the matter to A. N. Cheney, New York State Fish Culturist, and well known everywhere as an authority on fish questions. The following quotation from Mr. Cheney's reply may interest others of your readers as well as Dr. S.:

"As to size of the small mouth, I caught one in Long pond in '77 that weighed $8\frac{1}{4}$ pounds. I caught the fish in 5 minutes and was more than 5 years making people believe it. In '84 I sent one of $8\frac{1}{4}$ pounds to the National Museum at Washington, where it now is. This year (1899) one was caught in Long pond, now called Glen lake, weighing $8\frac{3}{4}$ pounds, and a few years ago I saw and weighed a fish that when first caught weighed 10 pounds. When I saw the fish it weighed $9\frac{1}{2}$ pounds. I know of a dozen or more taken from Glen lake weighing over 8 pounds."

Glen lake is only a few miles from Lake George, and was stocked with small mouth black bass from the latter lake.

Silas H. Paine, Silver Bay, N. Y.

A BLACK BASS PARASITE.

We have many black bass and perch here, but there are small white worms in the flesh. They are rather flat in shape, and about half an inch long. All I have found have been curled up. Sometimes when I have taken them out of the flesh and laid them down they have crawled, and sometimes there is no life in them. I have generally found them in the thick meat near the back. Can you tell me what this worm is and whether the fish have them only in certain waters? I have caught some nice bass lately, but do not eat them for this reason.

Will Prindle, Poland, N. Y.

ANSWER.

It would be hazardous to attempt to identify the worm parasite on the black bass to which you refer, without specimens for examination. If you can send me one or more individuals, preserved in alcohol or formalin, the identification can be made. Parasites of various kinds attack bass and other species of fish when the fish are placed in an unfavorable environment. The affection is probably not one peculiar to the fish of that particular pond. Bass in similar ponds elsewhere would probably be affected in the same way.

CORDS OF FISH.

One day last summer while fishing in Ten Mile creek, near the head of Lake Erie, without much success, we asked an old Frenchman where was a good point to catch fish. He was an agreeable old chap and told us where we could get some bass. We followed his instructions and had good luck. On our return we felt indebted to the stranger, so asked him over to our camp to have something. We gave him the most comfortable chair, passed the cigars, and my partner started the ball rolling by saying that fishing was not what it used to be. The old fellow said that in the '30's those creeks were so full of fish

they crowded one another out on the banks.

"I remember distinctly," he continued, "that in the fall of '32 this shallow creek froze solid to the bottom. The Frenchmen that were here in those days cut the ice, which was full of fish, and corded it up on the bank like wood. When spring opened it came rather hot suddenly and stayed that way. The boys came over to the creek to take care of their fish as soon as they could after spring set in. They found the ice had melted and the fish had swam away."

F. J. L., Toledo, O.

FISH NOTES.

I have heard of many strange catches by anglers, some of them being snakes, bulls, bullfrogs, turtles, etc. The most peculiar catch I ever heard of occurred on a pond not far from this city, and was brought to town to be mounted by E. W. Ensign, taxidermist. A foreigner, whose name I am unable to find out, while on a fishing trip was losing his live minnows, and he was unable to catch the animal that was robbing him. He kept on feeding it and losing his bait, but finally decided to put a small hook on his line and bait it. He threw in the pond and as soon as the bait was out of sight he had the same thing biting. That time he was successful, and he pulled up. What he thought was a fish turned out to be a pied-billed grebe, *Pedilymbus podiceps*, and it started to fly away, but he finally landed it. He had it mounted, and in dissecting it the taxidermist took the hook from its windpipe. This is true, as I saw it.

Fred. Saxe, Pittston, Pa.

Last June our board of health had to carry away our dead fish in 2-horse wagon loads from our borough of Ridgway. A paper mill at Johnsonburg, 8 miles above here, pours its waste into the Clarion river tributaries. The tanneries also dump their refuse into our streams. The State authorities know of these outrages, yet allow them to pass. I have refused to act as warden any more. We have a fish commissioner who is simply a toad stool. He draws a good salary, and that is all he cares for. Cans of fish are sent here consigned to individuals, and are simply dumped for want of attention. Recently one of our local papers stated that 10,000 young trout arrived at P. & E. depot, consigned properly, but remained uncalled for. How are we to remedy these evils?

We have an abundance of game and it is increasing rapidly now, as our second growth timber is doing well. Gray rabbits are plentiful.

Frederick Schroening, Ridgway, Pa.

In reply to Dr. S., of Cincinnati, O., in December RECREATION, I wish to say I know of 2 larger bass. One was caught a year ago last fall by Mr. Goerber, about 175 miles from Sheboygan, and the other by A. C. Thompson, of Madison, on Mendota lake, off Governor's island. Mr. Goerber's weighed 8 pounds 7 ounces, and Mr. Thompson's weighed 8 pounds 10 ounces. I have a picture of Mr. Thompson's bass, life size, and a facsimile of the affidavit.

I am glad you are giving it to the game hogs. I love the birds and am making ornithology a study. The police here are right after the boys with slingshots, and this last year I have seen more birds than ever before, as they are coming back to us.

Ray McDuffie, Sheboygan, Wis.

Late last spring I went fishing with my 4-ounce rod and some seine line. The rod I made myself, of hickory, with gas pipe for joints. It was a peach; strong as a beam, and limber as a whip. After I had been on the stream awhile I got a bite from something that pulled like a steam engine. The pole bent and twisted and cracked, and it took me half an hour to land my catch. It was the strangest thing I ever saw—a trout with 2 tails. That's the reason it pulled as hard as a twin-screw steamship, I suppose.

V. F., Stamford, Ct.

In December RECREATION Arch Davenport, of Ft. Scott, Kan., says he was bitten by a bass. I have never before heard of any one being injured in that way by a fish, but would suggest that he try a bandage made of blue ribbons for his wound.

Bloom Duncan, Paris, Tex.

The Codger — Why, Tommy! You wouldn't hit your little brother, would you?

The Kid—Well, yer don't tink fer a minnit I'd hit me big one, do yer?—Kansas City Independent.

The ice and coal men have a plot

With which to make their sales twofold:
In summer ice bills make us hot,

While coal bills make our blood run cold.
—Philadelphia Record.

"Sure, yer hair is falling out frightfully. You'll be bald soon if it kapes on."

"Faith, I'll be balder still if it don't kape on."—Melbourne Weekly Times.

Sillicus—None but the brave deserve the fair. Cynicus—That's right; they'll need all their bravery before they get through.

RECREATION is like Dewey—it beats them all.

Geo. W. Fargo, Jr., Kaukauna, Wis.

GUNS AND AMMUNITION.

HOW THE .30-30 AFFECTS MEAT.

In September RECREATION I find the query of H. I. Hill, of Springfield, Mo., as to what the effect of a .30-30 soft nose bullet would be on a deer, should it not strike a bone or vital part. This is in line with so much of the speculation in which I indulged before I bought my .30-30 that I will give my experience. The largest game on which I have used my rifle is woodchucks, and I find that when shot through the center of the paunch the bullet mushrooms well, making a hole at the point of exit as large as a silver dollar and taking a large part of the entrails with it. It mushrooms more in the paunch than in the neck or head. The latter shots make a hole at point of exit about the size of a 25 cent piece. The chucks drop as though struck by lightning and never move a muscle even when paunched at a point clear from the vitals. They even omit the usual flop of the tail. What the effect would be on deer I cannot say, but I think Brother Hill can easily guess. As for bleeding game, I find there is many times as much blood drawn from a chuck with the .30 as with my .45-70, as I tried them side by side. With the .45 both holes would close up and little blood be lost; but with the .30 the large hole lets out intestines, blood, and everything loose. I shot one chuck with the .45-70, the bullet entering just in front of the right hip and passing diagonally through, coming out in front of the left shoulder; yet he ran about 15 feet before stopping and did not leave a sign of blood on the ground. I never knew a chuck shot with the .30 to stir after he was hit. I have shot them at all ranges from 130 yards down, without raising my sights or making any allowance for distance.

I have reloaded my shells, both with high pressure powder and metal cased bullet and with King's semi-smokeless with a lead bullet, 1 to 10, and find they shoot well. The high pressure charges wear out shells somewhat faster than low pressure; still they can be reloaded satisfactorily. The low pressure load, which is semi-smokeless powder about equal in bulk to 35 grains of black powder, and the Ideal, No. 3086, 150 grain bullet, is extremely accurate and does not lead the gun at all. I have fired 25 consecutive shots with this load without cleaning, and could find no signs of leading or fouling.

I think the .30-30 no more dangerous than any other rifle larger than a .22, since the ball will be in the air, if fired at a great elevation, until spent, and when it drops it is no worse than any other spent ball of its weight, and not so bad as a heavier bullet. Also, it will not glance like a lead

bullet. The soft nose, expanding, clings to whatever it strikes and destroys the momentum of the bullet. I have fired several shot at rocks, at sharp angles, and have never been able to hear one hum as a glancing bullet does. They seem to impart all their energy to the first thing they strike, after which they are harmless. It makes little difference as to danger whether your falling bullet strikes within one or 5 miles of you. The chances of doing damage are the same. It can only strike in one spot anyway.

As to accuracy, I find my .30 equal, up to 500 yards, to any gun I ever used, and I have used some good ones; while its flat trajectory makes it much more accurate at distances between 100 and 300 yards, as you need not calculate the distance so closely.

X. Y. Z., Buffalo, N. Y.

WHERE 2 SAVAGES MET.

Prior to my going to Alaska, in 1897, I was induced to buy a .303 Savage rifle, in spite of a long standing prejudice against the small calibre rifle. I had always used the .50-110 for big game, and believed it the only thing.

I had no use for the new gun till the fall of '98, at which time it saved my life. I have used every American make of rifle, also the famous Mauser, and for depth of penetration and death-dealing shock there is no gun on earth to equal the .303 Savage. I speak now from actual experience.

While prospecting on the head waters of White river, 200 miles from the Yukon, I encountered one of the most savage beasts of the American continent, a silver tip grizzly. Leaving camp early in the morning, with a pack of 65 pounds on my back, to go 20 miles, I was tempted to leave my gun, and had it been the old .50-110 I certainly should have done so; but on account of the new gun being so light, the boys persuaded me to take it.

When about 4 miles out, and traveling up a crooked creek, with high banks, I turned one of the bends suddenly, and came face to face, without a moment's warning, with one of the most hideous looking silver tips it has been my misfortune to meet. I saw there was not a moment to lose. The bear was as much surprised as I, which gave me time to throw off my pack. Then with a growl which one who has heard it can never forget he charged me. I raised my rifle, took a quick but careful aim and fired. His head was slightly raised and I had aimed for the point of his nose. The bullet entered the left nostril, ranged through his head and passed out under his right ear.

His skull was smashed as if it had been struck with a pile driver.

The great brute wilted and died in his tracks. I was more surprised at the effect of the shot than at the sight of the bear. No ordinary gun could have stopped him. I took his skin, which measures 13 feet square.

In October of the same year I killed a bull moose with one shot, which cost me 7 cents, and netted me \$1,000 in Dawson. Moose meat sold then at \$1 a pound.

The Savage was the only rifle in our camp that stood the test in the extreme cold of the North. I have stood side by side with those other magazine guns and have heard them click, click, while the Savage was splitting fire and causing death. Their guns had frozen up.

If I were going to Africa to hunt elephants I should want no better gun than the .303 Savage.

Frank Hoyt, Seattle, Wash.

DON'TS FOR BEGINNERS.

Don't get rattled and empty your gun as fast as the lever can be worked when you jump a deer and he starts off on a run. One cartridge, well aimed, is worth a magazineful fired rapidly and at random.

Don't forget that a sharp eye, a keen ear and a steady aim are essential to a hunter.

Don't shoot where you imagine a deer's body to be when you can only see his head. Take the smaller mark or lose the meat.

Don't wear corduroy hunting clothes. When wet they are a mass of sticky pulp. Canvas clothes are better. Overalls are strong and tough, though easily wet.

Don't hunt in a single pair of cloth trousers. If this rule is not followed bare skin and the lower portion of your shirt are likely to shock the ladies on your return.

Don't forget that practice makes perfect. Practice is cheap and may be obtained with an empty gun.

Don't count your game before it is shot.

Don't, when tracking deer, be hoggish and follow the largest footprint. The experienced buck knows more than the fawn, or you.

Don't shoot at game which is out of range, or that which you are not reasonably sure of killing. This only causes useless suffering, and you are seldom benefited by so doing.

Don't shoot at every moving thing seen. You may be imprisoned for murder.

Don't use dogs in hunting deer. By so doing you admit yourself no sportsman, but rather a hog.

Don't get the idea that all hunters are sportsmen. Some of them are game hogs and belong to the lowest, vilest, most despicable type of humanity. All sports-

men are hunters, but all hunters are not sportsmen.

The other day an old friend of mine told me how, when a lad of 15, he had approached the most noted hunter of the village, who was an Irishman, and asked him for a few rules on deer hunting. The Irishman looked at the boy with a knowing twinkle in his eye as he replied, "Well, me bhoy, I'll tell ye. There air no rules, but there is a rule. Thet is, 'Say the dheer before the dheer says you.'"

"But how am I to follow that rule?" asked the youth.

"Thet is fer you to find fer yoursilf. Eg-sperience will show better than all the blarney in kingdom come. Dheer hunting, as a rhule, cinnnot be teached. Best it is to be self-eddicated in the art."

Sherman A. Paddock, Lancaster, Pa.

SEMI-SMOKELESS AND OTHER POWDERS.

To satisfy my curiosity, I have been trying several kinds of black powder, one or 2 low pressure smokeless powders and King's semi-smokeless in my .32-40 and .40-65 Winchester rifles.

Of the black powders, a certain F. G. rifle which is not advertised in RECREATION is the best for velocity and accuracy. King's semi-smokeless does the same work with less smoke, less report and recoil, and far less dirt than any black powder. The low pressure smokeless is accurate, but its penetration is far less.

My .40-65, with a full mantled bullet, penetrated 22 pine boards $\frac{7}{8}$ of an inch thick and nailed one inch apart; distance, 15 feet; powder same F. G. rifle. King's semi-smokeless F. F. G. did the same. Shells were loaded with the Winchester '94 tool. The penetration in seasoned oak with the grain was $11\frac{3}{4}$ inches. The Winchester catalogue gives the penetration for this charge as $11\frac{3}{4}$ -inch pine boards. With a half mantled bullet in front of the right load of semi-smokeless powder there should be shock enough to stop almost anything inside of 150 yards.

Two steers that I shot with half mantled bullets, one at 75 yards with a .32-40 and the other at 10 yards with a .40-65, were killed so quickly and thoroughly that neither moved a muscle until their throats were cut and the blood began to flow. The bullets were torn to pieces and only small parts of them could be found.

Semi-smokeless for revolver practice, I think, is the best powder in existence. There is no fouling whatever; it shoots the same each time and hits hard. I had my .32-44 target revolver rechambered to take the regular rifle shell, and I prefer it either for gallery practice or a longer distance. I always wash my shells as soon as possible with strong hot soap suds.

There is no question of the superiority of home-loaded shells, loaded by the Winchester '94 tool and with the right kind of stuff.

H. R. Pettit, Fort Atkinson, Wis.

EXTREME RANGE OF THE RIFLE.

Being a lover of the .22 calibre rifle I was much interested in what W. S. C., of Brooklyn, had to say on "The Danger Limit of the .22 Calibre" in a recent RECREATION. Some 15 years ago J. M. Godinez and I constructed a 200-yard rifle range and with our friends spent many pleasant hours there. We began with a Ballard, .38-50, equipped with peep and globe sights, and a Sharps .45-70. With both some good scores were made. Shortly after we bought a Stevens gallery rifle, .22 short, open sights, 24-inch barrel, 8½ pounds weight. With this gun we scored 15 shots straight on an 8-inch circle, at 100 yards. Finding that too easy, we moved back to the 200-yard firing point. At that range the lack of elevating sights bothered us until we hit on the idea of aiming at spots on a flagstaff behind the target. In that way we commonly made 20 out of 25 on the regulation 200-yard Creedmoor target. Greatly surprised at this work by the .22 short, we fitted the Stevens with sliding peep sight and globe front sight, and tried it on the military rifle range. Beginning at 200 yards and using the regular 500-yard target we paced back 50 yards and fired a few shots until we had the range. In that way we moved back until, at 450 yards, the peep sight could not be raised any higher, and we were obliged to aim over the top of the sight to get the proper elevation. At 450 yards, shooting in that manner, we were hitting the 6x6 foot target 3 times out of 5. One shot, which struck a sound hemlock timber under the target, penetrated nearly an inch. Remembering this work by the .22 short I am sure that W. S. C.'s estimate of 800 yards as the extreme range of the .22 long rifle, a much more powerful cartridge, is not too great.

Albert C. Gallup, Poughkeepsie, N. Y.

HE DID NOT MEAN SHOT GUN SMOKELESS.

I have read the article published in your December number signed "John H. Vernon, Sioux City, Ia.," and wish to call your attention to these points:

W. A. powder is no longer made by the Laflin & Rand Powder Company. The powder they now make is known and designated as Laflin & Rand shot gun smokeless. This is a dense nitro powder and cannot be used in charges such as are referred to by Mr. Vernon. He speaks of having loaded 63 grains in a 12-gauge gun. The regular charge for that gun is 35 to 42

grains, the latter being the maximum charge recommended by the company.

Again he says he loaded in a Blue Rival shell. That shell does not give satisfactory results with Laflin & Rand powder and has never been recommended for the powder. Afterward, Mr. Vernon cut down his charge to 54 grains, which is still 12 grains higher than maximum load recommended. He says that proved an effective load, but in the new few lines adds, "The experiment convinced me the powder was not uniform in pressure. If so, it could not be reliable and might prove too weak or too strong at some critical time, resulting in lost birds if weak or in a burst gun if too strong, neither of which is particularly enchanting to a common trap shooter."

What the experiment was which caused Mr. Vernon to form this opinion does not appear, and certainly his loading the powder in extreme charges and in an improper shell can hardly be taken as a test of the powder on which to base an opinion, much less to publish one derogatory of the product which he alleges he tested.

Laflin & Rand's present product is all right. Thousands of experts, both at the trap and in the field, are using it, and many of them have testified through RECREATION to its good qualities.

E. J. Baldwin, New York City.

HIS CHOICE IS .38-55.

Like most other shooters, I am a gun crank. One trouble with us all is we estimate too highly the experience of others. One man buys a .30-30 and has good luck with it. Another man reads about it, and decides to take the same kind of a gun to Maine with him in the fall. He thinks it will kill everything he points it at. He uses it, does not place his ball right, and the game gets away. His verdict is that the gun is not good for anything. He is mistaken. All the guns that shoot well are good. It is largely the man behind the gun who does the business. I have used a shot gun and a rifle 20 years, and found out long ago that if the gun was held right there was not much trouble in getting the game. I went to Maine with a small party the first of last November. One had a .45-70, 3 had .38-55's, one had a .32-40, and one a .32-20. The .45-70 killed 2 deer, the .38-55's killed 3, and the .32-40 2. The .38-55's killed their game cleaner and surer than the others; but it was largely because the game was hit better. For any game up to and including moose the .38-55 is an effective cartridge.

If you want a wicked shooting rifle use the .38-55 express bullet. One of our party dropped 2 deer in their tracks with a bullet of that size. All the other deer ran 10 to 25 rods before they fell.

All the guides I talked with in Maine condemn the .30-30. Two of them told me the .38-55 was powerful enough for any game in the Maine woods. They both said they had taken out sportsmen who used the .30-30, and they wounded lots of deer that got away. I think most of their trouble was caused by not taking more pains in placing their bullet.

C. A. T., Worcester, Mass.

TRY THEM ON THE GAME HOGS.

1. Where can I get a copy of the game laws of Texas?

2. Which is the best gun, the hammer the hammerless or the repeating shot gun?

3. What is pot hunting?

Have been reading RECREATION several months and would not be without it for any money.

4. Why not let the large and small bore cranks get out and settle their differences by trying their respective guns on the game hogs?

Success to RECREATION.

J. R. M., Jr., Dallas, Texas.

ANSWER.

1. The U. M. C. Co., No. 315 Broadway, New York, publishes a book containing a synopsis of the game laws of all States. In asking for it please mention RECREATION. For a complete copy of the game laws of your State, address the Secretary of State, at the Capitol.

2. The question as to which is the best gun is one which it would be impossible to answer fully and specifically through this medium. The good and bad qualities of all the leading guns are discussed in nearly every issue of RECREATION, and by reading the Guns and Ammunition Department carefully, you will doubtless be able to arrive at a decision as to what will best answer your purpose.

3. A pot hunter is a man who hunts simply for meat for his own table or for the market, and who has no regard for the sport, or for the rights of decent sportsmen.

4. A mighty good suggestion, and I wish we had laws in all States that would permit sportsmen to carry it out.—EDITOR.

BUCKSHOT IN AN 8 GAUGE.

Enclosed find \$1, for which please send me the sportsmen's friend, RECREATION. I admire the stand you take against the game hogs, and hope you may eventually get them all roasted brown. Is it safe to shoot buckshot from an 8-gauge shot gun?

Ralph Ferguson, Yeagertown, Pa.

ANSWER.

It is all right to shoot buckshot from a shot gun, without any special care in load-

ing, if it be a cylinder bore. If it be a choke bore then it would be necessary, after placing the powder and powder wads in the shell, to cut off the upper section of a smaller shell (say a 10-gauge shell), set it inside on top of the powder wad and place the buckshot in that. Then use such a size of buckshot as will chamber in the inner shell. That will insure the shot passing through the smallest part of the barrel without straining it. I should not advise you, however, to use an 8-gauge gun in any case. It is unsportsmanlike, and the use of such large bores is prohibited in most of the States. It should be prohibited in all.—EDITOR.

A .30-30 SAVED HIS LIFE.

I have been much interested in the discussion of the merits of the .30-30. I have gone through the whole list of calibers, have settled on the .30-30, and since going through a recent experience the little gun is dearer to me than ever. I was looking for black-tail deer and finding none started toward camp. Traversing a deep gorge I ran plump into a cinnamon cub. I caught it and it began to cry loudly. Instantly both the old bears charged me. I had my .30-30 and got down to business in short order. The first shot shattered the shoulder of mother bear, but on she came. As she turned her side to me in clambering over a rock I caught her just behind the shoulder with a soft-nosed bullet, and she rolled dead at my feet. Then turning, I sent another into the neck of papa bruin and it settled him. I feel I owe my life to the .30-30. A .45-90 or a .40-82 might have stopped them, but I prefer to take my chance with the little gun.

I. J. Bush, M. D., El Paso, Tex.

BLAKE RIFLE NO LONGER MADE.

Can you tell me anything of the Blake rifle, which was formerly made by J. H. Blake, New York? I saw one 2 years ago and was much interested in it. I have written the maker, but can get no answer. I have not seen the gun advertised in RECREATION, and never saw but one in use. It seemed to me to be a good weapon, using the .30-40 Winchester cartridge. Do you know anything about the gun, or can you tell me where I can hear of it?

I use a .30-30 Marlin, but am not satisfied with it, as it is very uncertain in killing big game.

W. P. Redmond, Jackson, Wyo.

ANSWER.

As far as I know the Blake rifle is not being made. Blake was formerly located on Liberty street, in this city, but is not there now. I have had many reports from

people who say they have written him repeatedly, but could get no reply.—EDITOR.

STILL USES THE .45-90.

A shot in head, heart or neck, from a .32 Flobert, will kill a deer as quickly as will a .45-90. About two-thirds of the deer killed are shot within 15 rods. A great many are shot in the side, a little far back. That kind of a shot from a .30-30 will not stop a deer so well as will the old .45, which makes a large hole on entering and goes through, allowing the blood to flow from both sides. A .30-30 soft makes a small hole on entering and generally goes to pieces; the deer bleeds inwardly and leaves no trace. If there is no snow and the ground is frozen hard you lose him. I shoot smokeless powder in my .45-90, with a 300 grain bullet, and for a large game gun think it's far ahead of the .30. The extra pound or so in weight won't make much difference to one who can tramp from daylight until dark, as most of us do who hunt deer in Michigan.

James Edwards, Grand Rapids, Mich.

AN OLD TIMER.

Herewith I send you a photograph of myself, my long gun and an ordinary 32-inch barrel gun, to show the contrast in the length. This old gun is 7 feet in length. It was made in London in 1799, as a brass plate on the breech tells. It was brought to this country soon after by a gentleman who came from England, and who sold it to my grandfather, who lived on a farm near Sandyspring, Montgomery county, Maryland.

The old gun next came into the possession of my father and he handed it down to me. I have not fired it at game for some years, as it is unhandy to carry, although it is not so heavy but that it may easily hold to the shoulder. The last time I did shoot it at game I killed 7 ducks at the one shot. It has killed many a canvas-back, on Chesapeake bay, where my father lived some years. If there is a longer gun in the country I should like to know it.

C. A. Bennett,

Editor The Journal, Granite Falls, Minn.

SMALL SHOT.

Ducks are scarce this season, and one of our prominent citizens, possibly the best shot on the Sound, was not killing them fast enough, so he wrote a well-known gun house in New York to send him a "flock gun."

In due time the gun arrived and the p. c. took it in the sneak box to try it.

Every time a flock came up he turned her loose. Result, *nil*. At first he thought he was not "on to" it, but one day he took it out and tried it on his barn. Same result; never touched it.

Then taking his pen in hand he advised the New York house that the flock gun was not worth a beaver dam. It would not even hit a barn. What should he do with it? The reply came on a postal card—"Try it on a flock of barns."

A. S. Doane, Coinjock, N. C.

I have a Winchester, model 1897, take-down gun, full choke 12-bore. I have used both kinds of powder and all sizes of loads, from 34-grain smokeless up. While loading, by mistake I got 2 34-grain charges in one shell, and when I shot that load I thought the gun would knock me off my feet; but I stuck to her. The cartridge burst at the breech and some powder and shell flew back. With a little work I took the shell out and the gun was as good as ever. This shell had 1½ ounces shot in it, 2 card wads, 2 black edge wads and was crimped tight. The Winchester is the best and the cheapest gun one can buy.

John N. Galigher, Zanesville, Ohio.

I have been trying the new shells recently put out by the Peters Cartridge Co. in my new hammerless and find them the perfection of shot gun ammunition. While dove hunting I fired nearly 50 shots without cleaning. Have never known a Peters shell to snap or stick and they foul a gun less than any other load I have used. To test the waterproofing I put several in water and allowed them to stand over night. When dried they fired just as did the other shells.

W. C. Whittemore, Redlands, Cal.

I should like to hear through RECREATION of the experience of some sportsman who has used the .23 calibre Lee straight-pull rifle, with soft-point ammunition, on deer and similar game.

P. W. Magill, San Francisco, Cal.

Has any reader of RECREATION a Hotchkiss repeating rifle which he bought of Bates & Co.? If so, will he please tell me its killing power and range?

George Smith, Newport, Ky.

Our club is using the Laflin & Rand's smokeless shotgun powder, and all agree that it is the best powder they ever used.
Rock Creek, O., March 22, 1899.

NATURAL HISTORY.

LIST OF NATIVE BIRDS MOLESTED BY THE ENGLISH SPARROW.

(From "The English Sparrow in North America," U. S.
Dept. of Agriculture, Bulletin No. 1).

The following table gives the names of
species which the sparrow is reported to
molest, and the number of such reports in
each case:

	Reports.
Bluebird (<i>Sialia sialis</i>)	377
Western bluebird (<i>Sialia mexicana</i>)	1
Robin (<i>Merula migratoria</i>)	182
Hermit thrush (<i>Turdus aonalaschkæ pallasii</i>)	1
Wood thrush (<i>Turdus musteli</i> nus)	4
Thrushes, species not indicated	14
Golden-crown kinglet (<i>Regulus satrapa</i>)	3
Chickadee (<i>Parus atricapillus</i>)	1
Titmouse, species not indicated	4
Tomtit, species not indicated	1
White-bellied nut hatch (<i>Sitta carolinensis</i>)	1
Nut-hatch, species not indicated	1
House wren (<i>Troglodytes ardon</i>)	64
Parkman's wren (<i>Troglodytes ædon parkmannii</i>)	1
Carolina wren (<i>Thryothorus indovicianus</i>)	6
Bewick's wren (<i>Thryothorus indovicianus bewickii</i>)	2
Wren, species not indicated	116
Brown thrasher (<i>Harporhynchus rufus</i>)	8
Cat-bird (<i>Galeoscoptes carolinensis</i>)	33
Mocking bird (<i>Minus polyglottos</i>)	50
Redstart (<i>Setophaga ruticilla</i>)	1
Yellow warbler (<i>Dendroica æstiva</i>)	11
Myrtle warbler (<i>Dendroica coronata</i>)	1
Warblers, species not indicated	15
Red eyed vireo (<i>Vireo olivaceus</i>)	2
Warbling vireo (<i>Vireo gilvus</i>)	3
White-eyed vireo (<i>Vireo noveboracensis</i>)	1
Vireos, species not indicated	9
Cedar bird, cherry bird (<i>Ampelis cedrorum</i>)	4
Purple martin, black martin (<i>Progne subis</i>)	65
Martins, species not indicated	198
Cliff swallow, mud swallow (<i>Petrochelidon lunifrons</i>)	25
Barn swallows (<i>Chelidon erythrogaster</i>)	24
White-bellied swallow, blue-backed swallow (<i>Tachycineta bicolor</i>)	40
Violet-green swallow (<i>Tachycineta thalassina</i>)	1
Bank swallow (<i>Clivicola riparia</i>)	2
Rough-winged swallow (<i>Stelgidopteryz serripennis</i>)	1
Swallows, species not indicated	84
Tanager, species not indicated	1
Indigo bird (<i>Passerina cyanea</i>)	5
Painted finch nonpareil (<i>Passerina ciris</i>)	2
Grosbeaks, species not indicated	1
Cardinal (<i>Cardinalis cardinalis</i>)	1
Redbird, species not indicated	11
Brown towhee, species not indicated	1
Chewink (<i>Pipilo erythrophthalmus</i>)	1
Song sparrow (<i>Melospiza fasciata</i>)	26
Chipping sparrow, chippy (<i>Spizella socialis</i>)	72
Field sparrow (<i>Spizella pusilla</i>)	2
Tree sparrow (<i>Spizella monticola</i>)	5
Common sparrow, species not indicated	19
Native sparrow, species not indicated	16
Ground sparrow, species not indicated	7
Other sparrows, species not indicated	39
Savanna sparrow (<i>Ammodramus sandwichensis savanna</i>)	2
Grass finch, vesper sparrow (<i>Pooecætes graminus</i>)	2
Grass bird, species not indicated	1
Snowbirds (<i>Junco</i> sp ?)	13
Goldfinch	
Yellow-bird } (<i>Spinus tristis</i>)	32
Wild-canary }	
Arkansas goldfinch (<i>Spinus psaltria</i>)	1
Red-poll (<i>Acanthis linaria</i>)	1
Purple finch (<i>Carpodacus purpureus</i>)	5
House finch (<i>Carpodacus frontalis</i>)	3
Other finches, species not indicated	4
Linnet, species not indicated	1
Purple grackle (<i>Quiscalus quiscula</i>)	2
Grackles, species not indicated	5
Baltimore oriole (<i>Icterus Baltimore</i>)	37
Orchard oriole (<i>Icterus spurius</i>)	4
Orioles, species not indicated	10
Meadow-lark (<i>Sturnella magna</i>)	3
Red-winged blackbird (<i>Agelaius phoeniceus</i>)	1

Blackbirds, species not indicated	8
Bobolink (<i>Dolichonyx oryzivorus</i>)	5
Shore lark (<i>Otocoris alpestris</i>)	1
Blue jay, jay (<i>Cyanocitta cristata</i>)	36
Crow, species not indicated	5
Least pewee (<i>Empidonax minimus</i>)	3
Wood pewee (<i>Contopus virens</i>)	1
Phoebe (<i>Sayornis phoebe</i>)	28
Great crested fly catcher (<i>Myriarchus crinitus</i>)	1
Kingbird	
Bee martin } (<i>Tyrannus tyrannus</i>)	17
Bee-bird }	
Fly-catchers, species not indicated	8
Insectivorous birds, species not indicated	5
Song birds, species not indicated	31
Humming-birds (<i>Trochilus colubris</i>)	1
Chimney swallow or swift (<i>Chætura pelagica</i>)	3
Red-headed woodpecker (<i>Melanerpes erythrorius</i>)	3
Yellow-bellied woodpecker (<i>Sphyrapicus varius</i>)	1
Sap sucker, species not indicated	2
Downey woodpecker (<i>Dryobates pubescens</i>)	8
Hairy woodpecker (<i>Dryobates villosus</i>)	1
Golden-winged woodpecker, flicker (<i>Colaptes auratus</i>)	3
Woodpecker, species not indicated	6
Yellow-billed cuckoo (<i>Coccyzus americanus</i>)	1

Annual increase and total number of English sparrows,
the progeny of a single pair, in successive seasons
for 10 years, assuming that all lived :

	Total number of birds.	Total number of pairs.	Number of pairs of young.	Number of pairs breeding.	Years.
First.....	26	13	12	1	First.....
Second.....	338	169	156	13	Second.....
Third.....	4,394	2,197	2,028	169	Third.....
Fourth.....	57,122	28,561	26,364	2,197	Fourth.....
Fifth.....	742,586	371,293	342,732	28,561	Fifth.....
Sixth.....	9,653,618	4,826,809	4,455,516	371,293	Sixth.....
Seventh.....	125,497,034	62,748,517	57,921,708	4,826,809	Seventh.....
Eighth.....	1,631,491,442	815,730,721	754,982,204	62,748,517	Eighth.....
Ninth.....	21,208,998,746	10,604,499,373	9,788,768,652	815,730,721	Ninth.....
Tenth.....	275,716,083,693	137,858,491,849	127,253,992,476	10,604,499,373	Tenth.....

After studying this record of devilry where is the man or woman, even in sentimental Boston, who will shout *vive la sparrow!*—EDITOR.

THE SUMMER HOME OF THE GOLDEN EAGLE.

E. I. HAINES.

In a recent work on ornithology, by a well known naturalist, I read with surprise the following paragraph:—"Golden Eagle; North America; of rare occurrence East of the Mississippi valley; a common bird of the Rocky mountains and ranges of the Pacific coast."

The same writer also says, "This majestic bird has become entirely extirpated in the more thickly settled parts of the Eastern States, and occurs near New York only as a rare straggler."

Of course eagles are not so numerous in North America as they formerly were. Neither is one apt to find them flying about our city streets, like the common house sparrow; but when it comes to asserting that they have been entirely exterminated East of the Mississippi, I protest.

It is not to be supposed that persons wishing to become acquainted with the golden eagle in its summer home would search the city parks for it, unless they were zoological gardens. Neither would they find it in woods or fields near towns or cities. Our bird of freedom has little love for civilization, and is to be found, therefore, as far away from it as possible. Beetling crags of mighty mountains, steep, rocky canyons and inaccessible cliffs, deep in the heart of wild and wooded regions, are chosen by this bird for its home.

Dr. E. A. Mearns tells us the highlands of the Hudson have been the home, for many years, of several pairs of golden eagles, who build their nests on the high, rocky ledges along the river. A pair of these birds have been seen as far South as Highland Falls and Fishkill, only 50 miles from New York city. There are numerous records of golden eagles having been seen in summer in the Berkshire hills of Massachusetts, but as that district is thickly populated the golden eagle is more apt to be an accidental visitant there than a regular summer resident. It is probably more common in the Taconic range and Saddle-back mountains in the Northern part of the State.

During the last 5 years I have been engaged on ornithological work in the Catskill mountains, where I first met and studied the golden eagle in its true summer home. The bird is common in many parts of the mountains, and is a familiar species to almost every native of the region. In the open and cultivated districts of Delaware county the golden eagle is

somewhat rare, though the farmers of the region report it as occurring quite frequently. The keeper of Mt. Utsayantha tower, Stamford, Delaware county, told me he saw a pair of golden eagles several times during July, 1899, and that on August 3rd he shot one which had come after his chickens. A splendid male specimen was caught in a steel trap at Harpersfield in September, 1899, and was kept several weeks in captivity in that town. Mr. A. M. Warner, of Stamford, shot a golden eagle on Mt. Utsayantha in August, 1895, and has it mounted in his home.

In the wild and mountainous region of Ulster county the eagle is a common summer resident of the higher peaks and rocky slopes, while on the top of Slide mountain, 4,220 feet high, I saw one of these birds on June 13th, 1898. While camping on the rocky summit of Mt. Wittenberg I saw several eagles. From good authority I also learned that a few built their nests every year on the rocky and inaccessible ridges of Eagle mountain and the Giant ledge. John Burroughs told me the golden eagle was common in the Catskills and was often seen in his native town, Roxbury, Delaware county.

The following records are a few of the occurrences, during late years, of the golden eagle in the Catskill mountains, as secured from reliable sources:

Ulster County: Valley of the Beaverkill, May 15th, 1897; Valley of Dry Brook, June 1, 1897; Valley of the Neversink (W. branch), June 10th, 1898; Wallkill valley, April 30th, 1897; Valley of Big Indian, July 20th, 1898; Alder lake, August —, 1891; Pea pond, May 20th, 1892; Furlough lake, June 17th, 1889; Tunis lake, June 21st, 1898; Frost valley, June 15th, 1899; Burnham Hollow, September 8th, 1899.

Delaware County: Mt. Utsayantha, July 15th, 1893; Harpersfield, July 19th, 1897; Davenport, August 20th, 1897; Odell lake, Stamford, July 20th, 1898; Hobart, September 12th, 1897; Almeda, August 29th, 1897.

It is absurd for theoretical ornithologists to dispute such statements, or to suggest that it was some other bird or the bald-headed species that was observed. As a rule, the cool, level-headed Yankee farmers know what they are talking about, and it borders on the ridiculous to say they confounded the golden eagle with some other species. The golden eagle is too well known for anyone to mistake it. It is quite likely that, though many people are trying to exterminate him, with both gun and pen, it will be many years before they succeed, or before his name will be added to the long list of extinct birds.

PTARMIGAN AND SPARROWS.

RICHARD C. M'GREGOR.

In the November number of your excellent magazine Mr. Bales describes the eggs of Alaska ptarmigan as being pure white. Now, so far as known to scientists, the ptarmigan lays one of the most richly colored eggs of any of our gallinaceous birds. The eggs of the rock and willow ptarmigan are highly colored, the ground color being reddish buff, over which are scattered more or less confluent spots and blotches of black and dark brown. All the authorities I have been able to consult agree on this point, and so I am inclined to think Mr. Bales has mistaken the eggs.

Several of your correspondents seem to be interested in the English sparrow. So are all of us. We have to be, for he is here to stay. Mr. Miner has given us a bitter pill, but not in just the way he meant when he says man should not interfere with the natural order of things. We are all sorry we did it, but it can't be helped now, for the sparrow has it his own way here, as he does in the old country.

The European house sparrow was given a fair trial in 1889 by Walter B. Barrows, and evidence from 3,000 witnesses is reported on in Bulletin No. 1 of the Biological Survey of the Department of Agriculture. For the benefit of those who have not examined this volume I have reduced to as small compass as possible the objections to the pest.

Wherever the bird is at all abundant it roosts, by hundreds, in trees and vines, which are soon disfigured and eventually destroyed by its excrements. Quantities of buds and blossoms are destroyed both on fruit and ornamental trees. Among these are peach, pear, grape, plum, cherry, apple, currant, maple, elm and evergreens. Not only this, but they do serious damage to the fruit itself. Grapes, apples, pears, figs and other fruits are reported as suffering. Vegetables, especially peas, lettuce, cabbage, beets and turnips, are seriously injured when young. Of wheat, oats, corn, rice and buckwheat, both seed and ripe crop are eaten.

Beside being directly injurious to vegetation, the sparrows drive away insect-eating birds. They are so quarrelsome that no self-respecting native bird can or will live near them. At least 70 kinds of native birds are reported as being molested by sparrows, and those, with the exception of not over 10, are species decidedly beneficial to the farmer and gardener. More than one-half the complaints relate to martens, swallows, wrens and bluebirds, all of which, when undisturbed, nest about houses.

The sparrow was imported under the impression that it would destroy worms,

but it not only dislikes worms, but it drives off the few native species of birds which would eat them. Professor J. A. Lintern says: "The extraordinary increase of the tussock moth or tent caterpillar, *Orgyia leucostigma*, is owing to the introduction and multiplication of the English sparrow. That the sparrows decline to eat the *Orgyia* caterpillar is not a charge against them. They could not eat them with impunity. The diet would doubtless prove fatal to them. The charge to which they are amenable is this: By the force of numbers, united to a notoriously pugnacious disposition, they drive away the few birds that would feed upon the caterpillars. Of these we know but 4 species, viz., the robin, Baltimore oriole, black-billed and yellow-billed cuckoos."

In 522 sparrow stomachs, examined at the Department of Agriculture, only 18 per cent. contained insects, and the greater part of these were innoxious species. Many of these stomachs were from Washington at a time when the trees were suffering from several insect defoliators, and but 2 specimens were found to have been eaten by the sparrows. Dr. C. V. Riley says, "There can be no more eloquent comment on the bird's uselessness in protecting vegetation from insect injury."

It is only fair to say that the sparrow does occasionally eat caterpillars when he is hungry, and the young are fed largely on insects, but insects form so small a part of sparrow food that it by no means balances our account with him.

Briefly, then, the sparrow injures and destroys fruit, grain, vegetables and ornamental plants, drives away beneficial native birds, and eats but few insects himself.

The English sparrow is a curse of such virulence that it ought to be systematically attacked and destroyed before it becomes necessary to deplete the public treasury for the purpose, as has been done in other countries.

DEFENDS THE ORIOLE.

ISIDOR S. TROSTLER.

I'm "summat riled" at some of your natural history correspondents who have letters in November RECREATION, and I must "shout right out in meetin'."

L. L. Bales, in his article on Alaska ptarmigan, says the eggs of the rock ptarmigan are pure white. I take issue with him on that point, and refer to 2 good authorities on American oology, O. O. Davie and the late Capt. Charles E. Bendire. I have a set of 9 rock ptarmigan eggs and they are true to the descriptions of the 2 authors mentioned. Eggs of the rock ptarmigan have a ground color of yellowish buff varying to a deep chestnut

brown, and they are spotted and blotched all over with dark brown or black. In size they average 1.25x1.78 inches.

Lawrence Shanny blames cuckoos with carrying off young birds. I will wager that Mr. Shanny's cuckoos that carried off the young robins were blue jays, *Cyanocitta cristata*, and that his orchard orioles that sucked eggs were either those same jays or cowbirds, *Molothrus oter*. Captain Charles E. Bendire, in his Life Histories of North American Birds, states, on page 480, Vol. II, that "Few birds do more good and less harm than our orchard oriole * * * and it certainly deserves the fullest protection." Bendire's work is recognized as the best of its kind ever published, notes from expert ornithologists all over America being used in its preparation. If the orchard oriole was, as Mr. Shanny says, "the meanest egg sucker of all birds," these expert observers would surely have found it out and mentioned it. I think Mr. Shanny has made an error in this matter, and I arise to defend the oriole.

If Mr. Redden will look up the yellow bellied sapsucker, in works on the life history of birds, he will find plenty of evidence in regard to the food of the bird in question. See, for example, page 82, Vol. II, of Bendire's Life Histories of N. A. Birds, or Bulletin No. 7, Division of Ornithology and Mammology, U. S. Dept. of Agriculture, a preliminary report on the food of woodpeckers, by F. E. L. Beal.

My experience with the European house sparrow, *Passer domesticus*, in city and country, leads me to believe they are a pest which must soon be abolished or we shall be deprived of many of our most beneficial birds. The sparrows have almost totally driven out the purple martens, *Progne subis*, and they are fast driving out house wrens, *Troglodytes aeden*; bluebirds, *Sialis sialis*; barn swallows, *Chelidon erythrogaster*, and robins, *Merula migratoria*. Large bounties have been paid for the killing of sparrows, but no visible reduction has been made in their numbers, and as they are prolific breeders, it is merely a question of a few years when they will have exterminated several valuable species of our avian friends.

I believe the only practical way of destroying these pets is to introduce a contagious disease among them. Of course, experiments must be carefully made beforehand, so the disease used in that way would not also destroy other species. As entomologists have succeeded in nearly exterminating the chinch bug by that method, there can be little doubt of its practicability.

I should like to hear from ornithological students on this matter. Let us try to drive out these "rats of the air" in

that way encourage beautiful and beneficial birds.

NATURAL HISTORY NOTES.

I was hunting rabbits recently and got one which had a large bunch under its fore leg. Soon there came out of a hole in this bunch a large, brown worm, with a black head, and around its body 7 or 8 rings. What are these worms and what do they become later? What do they spring from? Are rabbits good to eat when thus infested?

J. W. Bedell, Ballston Spa, N. Y.

ANSWER.

The worm described is undoubtedly the larva of one of the rabbit bot flies. At least 3 species occur in this country, the most common being *Cuterebra cuniculi* (Clark). This species is fully described and figured in its different stages in our U. S. Department of Agriculture Bulletin No. 5, New Series, entitled "Insects Affecting Domestic Animals." The presence of one of these larvae in a rabbit would hardly make it unfit for food unless the rabbit was diseased.

I see by late articles in RECREATION that the reputation of one of my little favorites, the red squirrel, is having a hard time. Let me state a fact in his favor. When my seed houses are taken possession of by the little chatterers, rats make themselves scarce. I do not know whether the squirrels fight them off, or whether rats have a natural antipathy for squirrels. Whatever may be the reason I know that my 1,400 bushels of corn, drying on the ear, are far less damaged since the coming of the squirrels than before. The little fellows, of course, charge a good living for their services, and right under my eyes tug away at some ear of corn, dragging it to their holes; but how can I begrudge them fair pay for work which saves me much greater loss, besides the filth and abominable smell caused by the rats?

J. J. H. Gregory, Marblehead, Mass.

Have any readers of RECREATION succeeded in raising quails in captivity? I want to raise some, but don't know how to commence. Do quails lay as many eggs in captivity as they do in their natural state? Is it best to hatch them under the old bird or to employ domestic fowls? Are quails harder to raise than pheasants are? Do they require as much or more care? What kind of food is best adapted for them? What kind of enclosure is best for them? I wish some one who has had practical experience with these birds and knows just what they require would tell us.

David Shafer, West Carrollton, Ohio.

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A. E. Pond, Chief Warden, 148 Fifth Ave., New York City.

Dr. C. C. Curtis, Sec'y-Treas., Columbia College, New York City.

OHIO DIVISION.

L. H. Reutinger, Chief Warden, Athens.

OREGON DIVISION.

Robert F. Kelly, Chief Warden, Box 188, The Dalles.

PENNSYLVANIA DIVISION.

C. F. Emerson, Chief Warden, 189 N. Perry St., Titusville.

UTAH DIVISION.

Hon. John Sharpe, Chief Warden, Salt Lake City.

VERMONT DIVISION.

W. E. Mack, Chief Warden, Woodstock.

VIRGINIA DIVISION.

Franklin Stearns, Chief Warden, 13 N. 11th St., Richmond, Va.

WASHINGTON DIVISION.

J. S. Stangroom, Chief Warden, New Whatcom.

WISCONSIN DIVISION.

James T. Drought, Chief Warden, Milwaukee.

WYOMING DIVISION.

Dr. Frank Dunham, Chief Warden, Lander.

Applications for membership and orders for badges should be addressed to Arthur F. Rice, Secretary, 23 W. 24th St., New York.

LOCAL WARDENS IN NEW YORK.

County.	Name of Warden.	Address.
New York,	Conrad L. Meyer,	46 W. Broadway.
Livingston,	M. De La Vergne,	Lakeville.
Nassau,	Willett Smith,	Freeport, L. I.
Albany,	C. D. Johnson,	Newtonville, N. Y.
Allegany,	J. D. Holden,	Belmont, N. Y.
Broome,	M. A. Baker,	Whitney's Point, N. Y.
Cayuga,	H. M. Haskell,	Weedsport, N. Y.
Cortland,	J. A. Wood,	Cortland, N. Y.
Chemung,	Fred. Uhle,	Hendy Creek, N. Y.
Erie,	E. P. Door,	103 D. S. Morgan Building, Buffalo, N. Y.
Essex,	Marvin H. Butler,	Morilla, N. Y.
Franklin,	W. H. Broughton,	Moriah, N. Y.
Montgomery,	Jas. Eccles,	St. Regis Falls,
Oneida,	Charles W. Scharf,	Canajoharie, N. Y.
Orange,	E. J. Breeze,	Forestport, N. Y.
	Wilson Crans,	Middletown, N. Y.
	J. Hampton Kidd,	Newburgh, N. Y.
Rensselaer/	Capt. J. B. Taylor,	Rensselaer, N. Y.
Richmond,	Lewis Morris,	Port Richmond, N. Y.
Schenectady,	J. W. Furnside,	Schenectady, N. Y.
Suffolk,	F. J. Fellows,	Islip, L. I.
	P. F. Tabor,	Orient, L. I.
Tioga,	Geo. Wood,	Owego, N. Y.
Washington,	C. L. Allen,	Sandy Hill, N. Y.
Westchester,	George Poth,	Pleasantville, N. Y.
Essex,	H. E. Braman,	Keene Valley, N. Y.
Rockland,	A. Woodward,	Ramapo, N. Y.
Sullivan,	Ernest W. Kenne,	Mongaup Valley, N. Y.
Dutchess,	} A. B. Miller,	Jackson's Corners, N. Y.
Columbia,		Sanataria Springs, N. Y.
Broome,	John Sullivan,	Port Jervis, N. Y.
Orange,	Thomas Harris,	Madrid, N. Y.
St. Lawrence,	J. W. Aitchison,	Memphis, N. Y.
Onondago,	James Lush,	Penn Yan, N. Y.
Yates,	B. L. Wren,	Pawling, N. Y.
Dutchess,	Chas. H. DeLong,	Billings, N. Y.
Dutchess,	Jacob Tompkins,	

LOCAL WARDENS IN OHIO.

Stark,	A. Dangeleisen,	Massillon.
Franklin,	Brook L. Terry,	208 Woodward Av., Columbus.
Cuyahoga,	A. W. Hitch,	161 Osborn St., Cleveland.
Clark,	Fred C. Ross,	169 W. Main St., Springfield.
Erie,	David Sutton,	418 Jackson St., Sandusky.
Fulton,	L. C. Berry,	Swanton.
Allen,	S. W. Knisely,	Lima.
Hamilton,	W. C. Rippey,	4465 Eastern Ave., Cincinnati.

County.	Name of Warden.	Address.
Knox,	Grant Phillips,	Mt. Vernon.
Lorain,	T. J. Bates,	Elyria.
Ottawa,	Frank B. Shirley,	Lakeside.
Muskingum,	Frank D. Abell,	Zanesville.
Scioto,	J. F. Kelley,	Portsmouth.
Highland,	James G. Lyle,	Hillsboro.

LOCAL WARDENS IN CONNECTICUT.

Fairfield,	George B. Bliss,	2 Park Row, Stamford, Ct.
	Harvey C. Went,	11 Park St., Bridgeport, Ct.
Hartford,	Abbott C. Collins,	783 Main Street, Hartford, Ct.
(County Warden, care Conn. Mutual Life Ins. Co.)		
Litchfield,	Dr. H. L. Ross,	P. O. Box 100, Canaan, Ct.
New Haven,	Wilbur E. Beach,	318 Chapel Street, New Haven, Ct.

LOCAL WARDENS IN NEW JERSEY.

Middlesex,	D. W. Clark,	New Brunswick.
Morris,	Joseph Pellet,	Pompton Plains.
Morris,	Chas. W. Blake,	Dover.
Morris,	Francis E. Cook,	Butler.
Passaic,	L. M. Lefevre,	Pompton Plains.
Somerset,	G. E. Morris,	Somerville.
Sussex,	Isaac D. Williams,	Branchville.
Union,	A. H. Miller,	Cranford.
	C. M. Hawkins,	Roselle.
Warren,	{ Jacob Young,	Phillipsburg.
	{ Reuben Warner,	

LOCAL WARDENS IN PENNSYLVANIA.

Venango,	G. D. Benedict,	Pleasantville.
Northumberland,	W. A. Reppard,	Shamokin.
Potter,	Byron Bassett,	Coudersport.
Crawford,		
(West half)	Jasper Tillotson,	Tillotson.
(East half)	Geo. T. Meyers,	Titusville.
Cambria,	W. H. Lambert,	720 Coleman Ave., Johnstown.
Beaver,	N. H. Covert,	Beaver Falls.
McKean,	C. A. Duke,	Duke Center.

LOCAL WARDENS IN MICHIGAN.

Kalkaska,	W. H. Dunham,	Kalkaska.
Kalamazoo,	C. E. Miller,	Augusta.

LOCAL WARDENS IN WYOMING.

Fremont,	Nelson Yarnall,	Dubois.
Uinta,	{ S. N. Leak,	Jackson.
	{ W. L. Simpson,	
Carbon,	Kirk Dyer,	Medicine Bow.

DISCOUNTS TO LEAGUE MEMBERS.

The following firms have agreed to give members of the L. A. S. a discount of from 2 per cent. to 10 per cent. on all goods bought of them. In ordering please give L. A. S. number:

Syracuse Arms Co., Syracuse, N. Y. Guns.
 Davenport Fire Arms Co., Norwich, Conn. Shot guns, rifles.
 Gundlach Optical Co., Rochester, N. Y. Photographic goods.
 Blair Camera Co., Boston, Mass. Photographic goods.
 Folmer & Schwing, 271 Canal Street, New York City. Photographic goods.
 The Bostwick Gun and Sporting Goods Co., 1528 Arapahoe St., Denver, Col.
 W. H. Langdon, Bridgeport, Conn. Sportmen's goods.
 New York Condensed Milk Co., 71 Hudson Street, New York City. Condensed products.
 Oneida Community, Kenwood, N. Y. Traps.
 Metz & Schloerb, Oshkosh, Wis. Moccasins, hunting shoes, etc.
 Novelty Cutlery Co., Canton, O. Pocket cutlery, ink erasers, etc.
 Gun Bore Treatment Co., 7 & 9 Warren St., New York City.

Willis Arms & Cycle Co., Kansas City, Mo. Bicycles, athletic and sportsmen's goods.
 Percy Selous, Greenville, Mich. Naturalist and taxidermist.
 Robt. H. Ingersoll & Bros., 67 Cortlandt St., New York City.

ANOTHER LEAGUE WARDEN ON THE WAR PATH.

After getting your note I went to see Braman. He was acting with Beede which is a good thing, as he may help to give Beede some backbone. Somewhere near Newcomb they found a party of men hunting with dogs. Braman went into the woods, pretending to be hunting. The men he met were suspicious of him, but he pretended ignorance of the locality and told them he was from Pittsburg and had a party camping in a place he pronounced wrongly; that they had dogs and he was afraid of game wardens. He won their confidence enough to have them show him deer they had killed, and I believe he helped them dress one. Some one sent in word that Beede was near, and some of the party got away. Among these were 3 Vermonters whom Braman says were the principal offenders. He knows who they are and expects to get them later. One or 2 of the starters came in, were suspicious of Braman and accused him of being one of Beede's men. He claimed not to know Beede and asked his description, which answered to that of the man who was questioning him. So Braman refused to answer any more questions lest he should give himself away.

They brought a hound to Braman that they had found and thought it might be his. He said it was not, but he would keep it and could use it. He brought it back with him. He is going back there, and says he has about 20 names on his list altogether.

One of the hunters told Braman it would not be healthy for any one to make them any trouble. He replied that he had the quickest rifle in the woods and had no fear as to his health. He will report to Mr. Pond when they get through. After seeing him I met a man I have camped with a good deal, and who had been out trapping near where these men were. He talked with 4 of them a few days ago. Says they were ugly and swore they would shoot Braman and Beede on sight. They said if all were treated alike they would find no fault, but that Weatherby, of Port Henry, a rich man and a politician, came there while Beede was there, with 11 hounds; that Beede said nothing, but went to Minerva and stayed till they had their hunt out. Of course his word is not worth much, but it is not improbable, as Beede owes his position to them. Politics and business do not go well together in anything.

A black tail deer was shot here recently, and the tracks of others followed. They must have come from Dr. Webb's. I understand he let some out a year ago.

Adirondack, Keené Valley, N. Y.

MR. LOVEDAY NOT GUILTY.

In December RECREATION I see a Mr. Loeffler, of Keokuk, Ia., most unjustly criticises Mr. Loveday, our efficient game warden, and calls him to account regarding the new game license law. This law is at fault only in that it should read \$25 for non-resident and \$10 for resident hunters. As to Mr. Loveday, he is doing everything in his power to protect the game, and results of his work show that he is on the trail of lawbreakers. We are but a few miles from the Mississippi river and but 14 miles from St. Louis. In consequence, we have, for years, been overrun with hunters of the Sunday variety, until quails are getting scarcer every year. The lakes are shot out, and the farmers are completely disgusted with hunters in general, having had their poultry killed in their barnyards, their cattle, and even their houses, riddled with shot. Now, thanks to Mr. Loveday and his co-workers, the farmers can live in peace, and the resident hunter will occasionally be able to kill a little game, for the license-paying sportsman is not a tough nor a game hog. I am inclined to think that if some of the record breakers, as Mr. Loeffler calls them, were to cross over to Iowa and begin operations Mr. Loeffler would think the boot pinched the other foot and he would be among the first to howl. If he wishes to shoot in Illinois he should be willing to pay his \$10 toward protecting the game.

If not, he is perfectly welcome to stay at home; or he may come without a license and test that law, as to whose validity he expresses a doubt. We can hardly expect him to do that, however, as some of his fellow Iowa sportsmen have had a taste of that medicine dished up by the lavish hand of Mr. Loveday. Hence Mr. Loeffler's kick.

Enclosed find \$1 for my membership in the L. A. S. May it live long and prosper.

J. M. Nixon, Columbia, Ill.

SECOND ANNUAL MEETING.

The second annual meeting of the L. A. S. will be held at the Hotel Marlborough, in this city, on Wednesday, February 14th, 1900, at 10 o'clock a. m. Eligible for membership therein:

All general officers of the League.

All chief wardens of divisions having 25 or more members.

All secretary-treasurers from divisions having 100 or more members.

All vice-wardens from divisions having 200 or more members.

All delegates chosen by the several divisions, and the chairmen of all standing committees.

All members in good standing are also requested to be present.

Topics of general interest to the League will be discussed, and it is hoped that a full attendance may be realized. Members who may determine to attend are requested to send notice to the Secretary at once, in order that a hall of suitable size may be engaged for the meeting. We hope to have at least 20 States represented in this meeting. We especially invite all local wardens to be present. It will greatly benefit the cause to have the members from various States and from various portions of each State meet, become acquainted, exchange views and ideas, and thus fit themselves for better and more effective work at home.

TWO NEW DIVISIONS.

Two more State divisions have been organized, namely: Vermont and California. Mr. W. E. Mack, of Woodstock, has been elected chief warden of the Vermont division, and President David Starr Jordan, of Leland Stanford University, has been chosen as chief warden of the California division.

Doctor Jordan does not pose as a sportsman; in fact, he told me years ago that he had never killed a bird or an animal for sport, and that he did not expect ever to do so; that he had never sacrificed the life of any such creature unless needed for scientific study. President Jordan is a naturalist of world-wide renown, and few men, living or dead, have done more to promote nature study or to educate the public in nature's works than he. The fact that he has joined this League and has accepted so high a position in it should induce thousands of other men, who love the birds and animals, to become members.

LEAGUE NOTES.

I have decided to offer RECREATION to members of the L. A. S. at 50 cents a year. Anyone who has any knowledge of the publishing business will readily understand that it costs me more than \$1 a year to print and send RECREATION to each subscriber. Yet I am anxious to see the League grow rapidly, and am therefore willing to furnish the magazine at less than *half the actual cost* as an additional inducement to sportsmen to join. No true friend of game protection should require such an inducement; but unfortunately there are thousands of people who always ask, "What do I get out of it?" Here is what you can get out of it, in ad-

dition to the satisfaction of knowing you are contributing \$1 a year to the great cause of game preservation. This offer relates to renewals as well as to new subscriptions.

Joseph Doty, of Pompton, N. J., was recently convicted by local L. A. S. Warden C. M. Hawkins, of Roselle, N. J., for fishing with set lines in the Pompton lake. Doty was taken before Justice Wm. Steele and fined \$20 and costs. Not being able to pay the fine he was committed to the Passaic county jail, at Paterson, for 30 days. Mr. Hawkins is also a State warden. Sportsmen in New Jersey should join the League and aid in the protection of fish and game. I should like to hear from the New Jersey members more than I do,

and any violation of game laws made known to me will have my personal and prompt attention.

A. W. Van Saun, Pompton, N. J.
Chief Warden.

F. H. Drake, Rochester, N. Y., is the first man to pay his membership fee 10 years in advance, and a gold badge has been sent him. We have a lot of gold badges on hand. Who will have the next one?

A prominent gun factory has donated \$100 to the L. A. S., to be expended in its work of game protection. There are several others that could well afford to follow suit. Which of them will be the first to do so?

EDITOR'S CORNER.

RECREATION desires to oe of the greatest possible service to its readers in every way. You are therefore invited to ask this office for any information you may want, on any subject whatever. If I cannot answer directly, I will endeavor to get the information, and reply at the earliest possible moment.

More especially if you are planning a hunting or fishing trip anywhere in the United States, Canada, or Mexico, let me know and I will tell you all that can be learned about the fish or game to be found in any such region, and as to the best means of reaching your objective point. In nearly every case, I can put you in correspondence with subscribers who live in the district in question.

If you do not see what you want, ask for it.

Mr. Ben Austrian, a painter, whose studio is at 1252 Perkiomen avenue, Reading, Pa., is turning his attention to the study of American game birds and mammals and is producing some really great pictures. The greatest thus far is entitled "A Day's Hunt," and shows a goodly string of ruffed grouse, quails and rabbits, hung on an old barn door. The fur and feathers, the wood and the old rusty strap hinges are reproduced in so realistic a manner as to deceive any one but an expert.

In "A Day's Hunt" there is no exaggeration, no weakness. Truth has been sought by the artist, and his brush has given it expression. Mr. Austrian is never afraid of reality. His method of interpretation is studious and faithful, closely observant, and without any temptation to display meretricious work at the expense of the really intrinsic value of his subjects. His pictures are always interesting from the amount of earnest work they contain. They are like translations of bits of na-

ture from the haunts of game of all kinds to the more quiet repose of the canvas. Here, under the manipulation of brush and pigment, grow easily recognizable presentments of the tenants of wood and field, and a look at such a picture makes one long for a day behind a good dog and a good gun.

"A Day's Hunt" will probably be exhibited at the New York Sportsmen's Show, and if so you can see whether or not I have spoken truly of it.

A BACK NUMBER GOVERNOR.

New Jersey is singularly unfortunate in the choice of a Governor. From various sources come reports to the effect that Governor Voorhees has declared himself opposed to all game laws and to all efforts for protecting game and fish. He is said to have declared he would pardon any man who might be convicted of a violation of a fish or game law, during his administration. I am informed on what I regard as good authority that only a few weeks ago he said to Assemblyman Mungle, of Essex county, that all fish and game laws should have been wiped off the statute books long ago.

Governor Voorhees demanded of the Fish and Game Commissioners, whom he appointed, the removal of State Fish and Game Protector Shriner, one of the best executive officers any State commission ever held. It seems the Governor had not the power to remove a State game protector, or Voorhees would have disposed of Shriner long ago. Voorhees' term expires in January, 1902, and a united and concerted action should at once be inaugurated to elect a man who would properly enforce the game and fish laws.

It is astonishing that the sportsmen of

New Jersey should ever have allowed a man to be elected to the highest office in their gift who is so pronounced a friend of game law breakers as Voorhees is. It is stranger still that in this enlightened age of the world a man of ordinary intelligence could be found who would thus publicly proclaim himself in favor of the wiping out of the birds, mammals and fishes of an entire State. I do not believe a parallel case exists in the history of the United States. I do not believe any State has ever honored a man with an election as Chief Executive who would thus publicly and officially aid and abet netters, dynamiters and game butchers of all kinds. It is indeed fortunate that the laws of New Jersey tie the hands of this bird and fish destroyer, at least in a measure.

DR. ELLIOTT COUES DEAD.

Prof. Elliott Coues, of Washington, D. C., a world-famed naturalist, died on Christmas day at Johns Hopkins Hospital, after a surgical operation. He was born in Portsmouth, N. H., in 1842, and was graduated from the Columbian university, in Washington, in 1861. He entered the army as a medical cadet in 1862, and left it as a surgeon many years later. He was a member of at least 50 foreign and American scientific societies.

His "Key to North American Birds" and his "Check List of North American Birds" are standard reference works everywhere.

Edward T. Latham died suddenly at his home, Langallen, New Brunswick, N. J., on September 16th.

For many years he was one of the familiar figures in New York city, as cashier of the banking house of John Munroe & Co. He lived with his mother in New

Brunswick, where he was widely known, as well as in New York, for his benefactions, his host of friends and his sympathies with art and culture. He was a genuine sportsman, a member of the L. A. S., and his loss will be keenly felt by all who knew him.

RECREATION GROUP IS GROWING.

The following additions have been made to the RECREATION group in the New York Zoological Park since last report:

Nov. 1. Blue Racer, presented by Percy Selous, Greenville, Mich.

Nov. 18. Screech Owl, presented by Myron J. Winslow, Sloansville, N. Y.

Nov. 18. Opossum, presented by Roland H. Clark, New York.

Nov. 21. Opossum, presented by H. L. Allen, Prince's Bay, New York.

Dec. 14. Screech Owl, 1 specimen; 3 Opossums, presented by Orsamus S. Cottrell, Jr., Keyport, N. J.

Dec. 16. Snowy Owl, presented by Mathias Grewer, Glen Ullin, N. D.

Dec. 20. Ring Dove, presented by George Harp, Brinley, O.

If you have not yet ordered a set of the Hudson pictures, illustrating the poem "To My Gun," you should do so at once. Only a few sets were printed, and about half of them have already been sold. No more will be printed, as the plates were too much worn in running the November edition of RECREATION to make any more good impressions. Only \$1 for the 5 full page artist's proofs. Nothing finer could be found at the price, for decorating an office, a dining-room, a parlor or a den.

"If a man who, after years of effort, should have a great day and actually kill more than was proper, why should all charity be forsaken?"

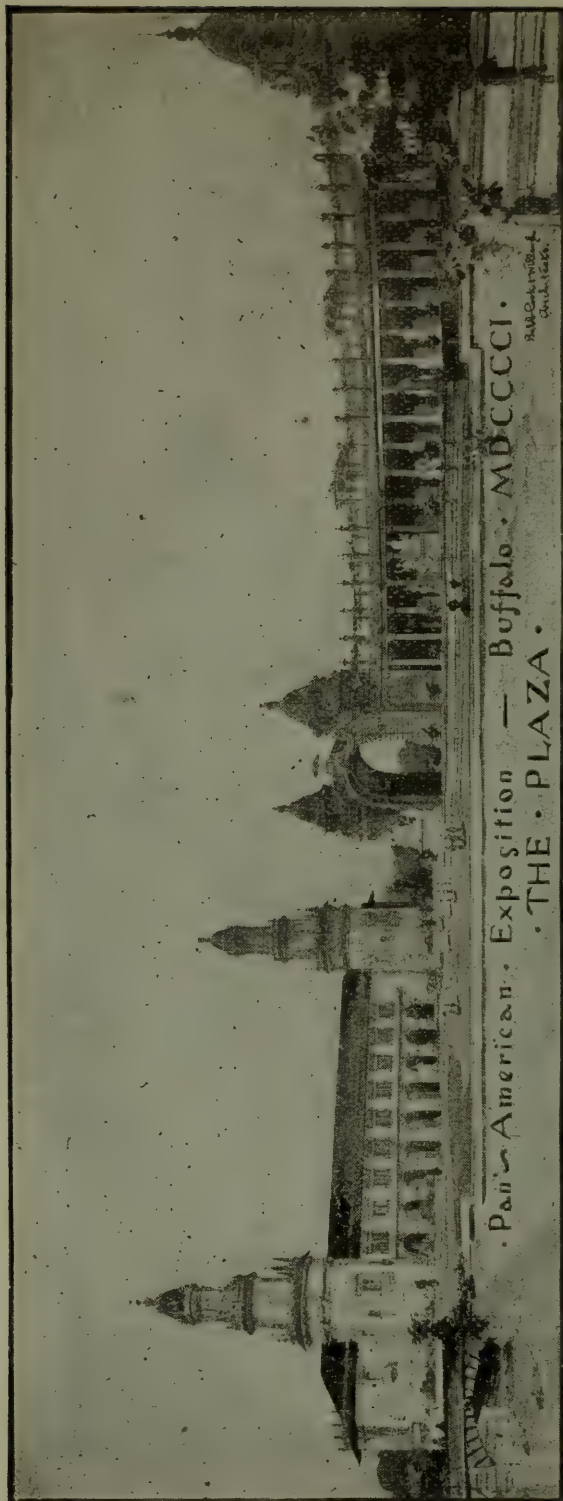
So says Reynolds, editor of the A. D. G. H. He apologizes for the game hogs in almost every issue. He thinks they should be allowed full sway whenever they get a chance to make a record.

PUBLISHER'S DEPARTMENT.

The Racine Boat Manufacturing Company, of Racine, Wisconsin, has issued a catalogue that for fine pictures and exhaustive information breaks the record. It has 17 full page half-tones and 102 smaller cuts, each illustrating some important feature of boat building or a model of a boat, or a picture of a boat under sail or under steam. The engraving and printing are of a high order, but the exhaustive descriptions, instructions and hints contained in the book are its most valuable feature after all. You can here learn all you can possibly wish to know about the plan, construction and operating of any kind of boat, from a cedar canoe you can carry under your arm, to a \$20,000 pleasure yacht. On page 50 there is a picture of a 6-oar ladies' barge in which 8 pretty girls

are seated, and which is alone worth the price of admission. This catalogue should be in the hands of every man who is fond of the water or who expects at any time to navigate it, either for pleasure or on business. You can get a copy by writing the company as above and saying you saw it mentioned in RECREATION.

The new catalogue of the Stevens Arms Company, Chicopee Falls, Massachusetts, shows a complete line of fine rifles and pistols made by this well-known house. It contains a great deal of valuable information on the subject of rifles, rifle shooting, cartridges, powder, and is completely and liberally illustrated. You can find in this book a cut of every rifle and every pistol made by this company, and of nearly every



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cartridge and bullet in the market. The book is a library in itself, and every sportsmen should have a copy of it. Of course in writing for it, you should say you saw it mentioned in RECREATION.

THE PAN-AMERICAN EXPOSITION.

Here is a picture of the stadium, or athletic field, as it is to be at the Pan-American Exposition at Buffalo. It is to resemble, in a general way, that erected at Athens a few years ago, although this one

can be, of course, only a temporary structure. It will seat 25,000 people, and is intended as a model of what it is hoped may be some day built in permanent form. It has a quarter mile running track and sufficiently large space in the inside of this for any of the other athletic games. A large number of aisles are planned to reach the seats, and, in addition to the principal entrance on the West, there are provided 7 large exits. These are to be of sufficient breadth and height to admit, in case of need, the largest vehicles or floats, as it is proposed to use the stadium for certain pageants, exhibits of automobiles in operation, judging of horses, live stock, agricultural machinery, road machinery, etc. No exhibitor has ever had such a splendid arena in which to display such exhibits, and the athletic carnival, to which the stadium is to be devoted, is to be one of the most interesting features of the exhibition. The space under the seats is to be used for exhibition purposes, and is in itself the equivalent of a large building.

The total length of the stadium, including the building which forms the entrance, is about 870 feet, and the width is about 500 feet.

IMPROVEMENTS IN DINING CARS.

Commenting on the recent change in the operation of the dining cars on the New York Central, and the improvements now being made in the service, the New York Commercial Advertiser says: "In most dining cars the kitchen, in one end of the car, opens into a passageway inside of the car, and the fumes of the cooking and occasionally smoke are wafted into the car while passengers are at the tables. All the dining cars on the New York Central are being built so there shall be no opening from the kitchen into the interior of the car. The only approach to and exit from the kitchen will be by way of the platform vestibule, about half of which is made a part of the kitchen." This change will be greatly appreciated by patrons of these cars.

The dining car service on the New York Central is now under the direct charge of the general passenger agent, and it is the intention to make it as nearly perfect as possible in every respect.

The Peters Cartridge Company, of Cincinnati, Ohio, is always at the head of the procession. It is the first to issue a calendar for 1900 and this, as well as its predecessors, is a beautiful work of art. The centrepiece illustrates a hunting scene on the Western plains and represents a cowboy riding up to an antelope he has just killed. Scattered around the margin are vignettes of hunting scenes in Porto Rico,

Cuba, Hawaii, the Philippines and Florida, and to finish the scope of the Peters Cart-ridge Company, there is a target shooting scene in one corner. The work comes from the American Lithograph Company, of New York, and is done in 6 colors. The calendar is destined to be in great demand and the company must have provided an immense edition of it to meet the requirements of the thousands of sportsmen who will ask for copies to hang in their offices or dens.

When writing for it mention RECREATION.

Newport News, Va., Sept. 26, 1899.
Western Gas Engine Co.,
Mishawaka, Ind.

Gentlemen:—The 25 foot gasoline launch "Warwick," shipped to Mr. A. H. Byrum, of this city, arrived on time, and I have been aboard of her on nearly every trip she has made, some of them as much as 35 miles. I never saw a better working piece of machinery in my life, though I have had 15 years' experience with different kinds of machinery. The model of the boat is beautiful, and the engines are as near perfect as can be.

I cheerfully recommend the Western Gas Engine to all who are in need of pleasure boats.

Yours truly,

T. H. Sharp.

Mr. R. H. Wilbur, general superintendent of the Lehigh Valley Railway, has issued an order instructing his trainmen to carry, free, cans of young fish and crates of fish eggs, in baggage cars, and to return empty cans free, when such are shipped by the U. S. Fish Commissioner, the New York State Fish Commission, the Pennsylvania State Fish Commission, or the New Jersey Fish and Game Commission.

Baggage masters are instructed to render all reasonable assistance desired by messengers in charge of fish, and to allow them access to baggage cars for the purpose of giving the fish proper attention.

Here is a railway company that realizes the necessity of stocking the waters in its territory with game fishes.

Mr. George E. Moulthrop, Bristol, Conn., has issued a calendar for 1900 which is a novelty among all the hundreds of time boards that are now being circulated. The center is a fine photograph of a New England mill, and shows a picturesque bit of the river, of an old dam, and a few trees in the background. It is a beautiful bit of composition and the calendar itself is a

brochure of the printer's art. It sells for 25 cents a copy.

The spat-puttee is a most admirable example of a gaiter, inasmuch as it supports the leg and fits perfectly. It is difficult to find any other gaiter which does set to a woman's leg, and these spat-puttees are also adapted for children. The agents will forward to any one on request a list of patterns and pictures demonstrating their possibilities. Address Bale & Manley, Wool Exchange, New York. Mention RECREATION.

The Ideal Manufacturing Company, New Haven, Connecticut, has issued 2 tables comparing black and smokeless powders. They have been submitted to each of the different powder manufacturers and have been approved by them. These tables will be of value to every shooter, and can be had free by writing the Ideal Manufacturing Company, and saying where you saw this notice.

Another great offer: A Yawman & Erbe automatic reel for 5 subscriptions to RECREATION. For 2 years past I have been giving this reel for 10 subscriptions, but on account of a special arrangement recently made with the manufacturers am now prepared to make this remarkable offer. Sample copies, for use in canvassing, sent on request.

The small ads we have had in RECREATION have produced so much business that we are sometimes compelled to refuse some of it. We would gladly keep a small ad standing, but it would simply entail a loss of time and postage, telling people we couldn't supply their wants. Within the past few days we have disposed of all the birds we can spare until October, 1900.

D. G. Black, 26 Cortlandt St., New York City.

AULD LANG SYNE.

The handsome Doulton ware jugs of Dewar's special old Scotch whisky, which appear illustrated in my advertising columns, are useful as well as ornamental. It is a very attractive proposition to get a jug of the finest Scotch whisky, direct from the distilleries of Perthshire, but this is what you get if you order from Dewar.

About 2 years ago in Portland copies of RECREATION could be bought any day for the current month, but now the dealers get large numbers and they are gone in 3 days.

John W. Martin, Palestine, Ore.

PURE AND IMPURE FOODS.

EDITED BY DR. JAS. WEIR, JR.

Author of "The Dawn of Reason," "Suicide in the United States," "Socialism Among Bees," "The Antiquity of the Human Race," etc.

"What a Man Eats He Is."

EAT THINKINGLY.

I have more than once in these pages called attention to the average man's habit of bolting his food in the shortest time possible, instead of making his meals both enjoyable and profitable by giving up some portion of his time to these necessary functions. If one is, perforce, *a la solitaire* as to meals, he can spend his time while eating in "chewing the cud of gentle reflection." If, on the contrary, one has company while at table, he can prolong the meal in pleasant conversation. All I insist on is that plenty of time should be given each meal and that food should be thoroughly masticated before it is swallowed. This latter proposition is by far the more important. A writer in one of the current medical magazines in regard to thorough mastication makes the following exceedingly pertinent remarks:

"Meats, as ordinarily prepared for the table, are softened and disintegrated by boiling, broiling or stewing. The fibres are separated and no great amount of mastication is necessary to reduce them to a pulp and mix them with the saliva. Later, the gastric juice has readier access to them in this softened, pultaceous condition. The action of saliva on the starchy foods prepares them for the action of the stomach pepsin and hydrochloric acid. They are first converted into sugar. A piece of bread chewed slowly and well mixed with saliva becomes sweet to the taste. Yet, as a rule, such foods as bread, crackers, hominy, potatoes, toast, oatmeal, rice, parsnips, turnips, peas, beans, etc., are chewed very little, are swallowed with some difficulty, and are usually washed down for convenience and saving of time with copious draughts of liquids. For perfect digestion it is essential that the starch granules in all these foods should be freed from their enclosing envelope and the whole subjected to the action of the saliva."

NUTS.

Fill your pockets with almonds and hazel nuts and munch them between meals when you have that tired feeling. It will leave you as though by magic. Long before we became dignified, earth-walking men we lived in trees and ate nuts. In those old days we were too weak to obtain the proteids in the shape of meat, so we satisfied ourselves with them as they were to be found in nuts.

A perfect substitute for the proteids afforded by meats may be found in nuts, or perhaps it may be said with greater propriety that nuts afford the original source of proteid nutriment intended by nature for human consumption. Nuts are, in fact, vegetable meat. The peanut contains nearly 50 per cent more proteid matter than an equal quantity of the best beef. The same is true of peas, beans and lentils. Nearly all other nuts are as rich in proteids as the peanut is. It is only necessary that these food substances be properly prepared to render them capable of completely replacing flesh foods of every description, not only in affording necessary proteids, but in satisfying all reasonable demands of the palate for gustatory stimulation. This sense of taste is without doubt intended by nature to be a correct guide in alimentation. The unperverted taste calls for just the kind of food needed and just the proper quantity, and ceases its demands when the needs of the body have been supplied.

Within the last few years nuts have been widely introduced in the place of meats, and with the most beneficial results. Thousands of people are to-day substituting nut preparations of various sorts for flesh foods of every kind, and with highly beneficial results.

THE FOOD VALUE OF BEER.

The advocacy of the food value of any alcoholic beverage should have its restrictions. Not long ago a distinguished scientific man, who fills a chair in one of our foremost universities, was so indiscreet as to yield himself a willing victim to the plausible and wily reporter. The results of this interview have been, without doubt, extremely disastrous. The reporter made the professor an advocate of and believer in the high food value of alcohol, and many people were thereby led to fatten themselves on alcohol at the expense of their stomachs, livers, kidneys, and brains. Certain malt liquors unquestionably have high food values, notably the heavy bodied American beers. Foreign beers are loaded with "preservatives," consequently are poisonous and of no food value whatever. Bavaria will not allow preservatives in the beers sold to her own native population, while the beers sent to us fairly reek with boracic and salicylic acids and kindred poisons. Our own domestic beers are far more nutritious and healthful than

any of the foreign beers. In his evidence before the congressional committee Prof. Hart gave the following reason for the present unusual consumption of beer:

"The true reason for the enormous consumption of beer is that it supplies nutritious matter, which adulterations of flour have taken from the bread. The working man can no longer sustain strength on the bread he is able to buy, and is forced to drink beer. Malted barley is analogous to wheat. Beer is really a staple article of food and should be kept pure and unadulterated."

EGGS.

Eggs should occupy a more prominent place on our table. They are about one-third solid nutriment, which is more than can be said of meat. With the exception of the shell an egg is all food. "There are no bones, no tough pieces that have to be laid aside. A good egg is 10 parts shell, 60 parts white, and 30 parts yolk. The white of an egg contains 66 per cent. water, and the yolk 52 per cent. Practically an egg is animal food, and yet none of the disagreeable work of the butcher is necessary to obtain it. The vegetarians of

England use eggs freely, and many of these men are 80 or 90 years old, and have been remarkably free from sickness. Eggs are best when cooked 4 minutes. This takes away the animal taste, which is offensive to some, but does not harden the white or yolk so as to make it difficult to digest. An egg if cooked hard is difficult of digestion, except by persons possessed of stout stomachs. Such eggs should be eaten with bread, and masticated finely. Fried eggs are much less wholesome than boiled ones. An egg dropped into hot water is not only a clean but a delicious morsel."

I notice in one of your copies of RECREATION, in the department of Pure and Impure Foods, a correspondent states that the secret of barbecued shote is its rapid cooking. A shote should never hang over the coals less than 6 hours, and 8 are better. The secret is the constant basting with a mixture of vinegar, pepper, salt and butter. The test of the heat is that the hand can be held on the under side of the meat next the coals without discomfort.

James C. Bloomfield, M. D., Augusta, Ga.

FORESTRY DEPARTMENT.

EDITED BY DR. B. E. FERNOW,

Director of the New York School of Forestry, Cornell University, assisted by Dr. John N. Gifford, of same institution.

A BOOK ABOUT TREES.

ARTHUR F. RICE.

Through the courtesy of Dr. Wm. Seward Webb, I have been put in possession of an interesting and instructive little book entitled "The Adirondack Spruce." It deals with practical forestry and throws much light on a subject deserving of far more attention than has generally been given it.

In 1896 Mr. Gifford Pinchot, the author of the book, and Dr. Webb, the owner of Ne-Ha-Sa-Ne Park, a beautiful tract of virgin forest land in the Adirondacks, entered into an arrangement, the ultimate object of which was to be "the preservation and proper management of spruce lands in the Northeastern United States." It was a fortuitous combination of ripe intelligence, ample means, and magnificent opportunity. Ne-Ha-Sa-Ne Park contains 40,000 acres and includes the various features requisite to a broad study of the theme. The observations, surveys and experiments were not, however, confined to that one tract,

but embraced contiguous lands owned by William C. Whitney, P. Moynihan and the Santa Clara Lumber Company. The field work done comprised the counting and measurement, on 1,046 acres, of all spruces down to a diameter of 2 inches and of all other trees 10 inches or more in diameter. The motive and deductions were eminently practical because they dealt not only with the science of forestry, but also aimed to "assist the American lumbermen to get better returns from their investments."

Too frequently the aims of the forester and the interests of the lumberman have not seemed to be in harmony; the one striving to preserve the forests, and the other laboring to deplete them in the shortest possible time. If therefore it can be shown that the lumberman may cut his crops of timber at intervals with the certainty of having a steady, dividend-paying investment, by the mere exercise of moderate precautions, our magnificent forests instead of being wrecked and ravaged will be

preserved and perpetuated. We may even safely affirm that with proper care the valuable timber may be cut periodically and the forest become more flourishing than in its virgin state; because the removal of worthless and stunted trees, while cutting the most valuable ones, gives the young and thrifty timber a chance to develop more rapidly.

Scientific lumbering means the conservation of forest energy; and while it arrogates to itself the right to take a larger part of the most merchantable product, it prepares the way for a duplication of that product. It leaves some of the large conifers, in a pine or spruce forest, to seed the ground anew; it takes care that in felling timber the young growth is not crushed or injured; it uses the greatest care to prevent forest fires; it takes account of the various conditions under which different species flourish best; and it does not overlook the fact that species like the maple, birch and beech, which, generally speaking, are not now marketable, may in the near future possess a high value and yield rich returns. The proper management of timber lands is not, therefore, a mere matter of sentiment; it is a question of dollars and cents as well.

The relation of the forests to the water supply is too well known to need much comment. The razing of great tracts of timber, which like huge sponges absorb and hold the water, feeding it out slowly and equalizing the flow of the streams, dries up the forest flow and allows the melting snows to rush off quickly in the spring. The results are early freshets and drought and dry watercourses later. The preservation of the woodlands, therefore, means much, not only to the hunter, the angler, and the lover of nature, but also to the mill-owner and the householder.

The destruction of trees is not always confined to the lumberman. This is, in a sense, an age of extermination, and woe to anything that stands in the way of our much-vaunted progress or which appeals to our cupidity. Two or 3 years ago the main street of the city of Hudson, New York, was lined on either side with noble elms that were a joy to the eye. They lent comfort to the citizens and dignity to the town. They were a patrimony of which the heirs might well be proud and in the preservation of which their self-interest and love of the beautiful were both involved. But this is the age of progress! and so it happened that a hungry trolley company and a Celtic city council decreed that the street should be widened and that the trees must come down! They did come down, and the once beautiful street now looks like a whited sepulchre. I don't know what happened to the men who wrought this ruin, but I know

what should have happened to them: they should have been hung to the nearest elm tree and buried underneath the trolley tracks in that very street. There is a Spanish proverb to the effect that he who sets out a tree where none grew before is worthy of all respect. What, then, shall we say of those who destroy trees and leave none in their place!

The little book I have mentioned is handsomely illustrated and is published by the New York Critic Company. It is full of suggestion and information alike to the lumberman and the layman, and the subject with which it deals is of such vital importance that I wish every reader of *RECREATION* might include it with his text books. Lumbering has been and is being carried on with so reckless a disregard for the future that every thoughtful man must be apprehensive of the prospective result. The short-sightedness of the present system is so manifest that the practical efforts of such men as Dr. Webb and his associate cannot fail to bear good fruit. Every man who loves the song of the wind in the pines and the sight of the spruce spires against the sky; who sees in the rugged oak, the graceful elm and the maple in its autumn glory something more than mere boards and beams, should himself become a forester to the extent of lending his voice and his vote to the good work of forest preservation.

DESTRUCTION OF TREES BY INSECTS.

As long as forest fires and the indiscriminate cutting by the lumberman play havoc with our forest resources we may perhaps look on the feeble attempts of insects to assist them with complacency, for, comparatively speaking, their damage is but small. Yet within the last 10 years the state of Massachusetts has paid out at the rate of one hundred thousand to two hundred thousand dollars a year to cope with an insect pest, imported from Europe, which has not confined itself to ravaging the fruit trees as it does in its native home, but has gone into the woods and eats everything that comes before it, or rather that it can reach. There is, indeed, a separate commission, appointed by the state, charged with reducing the damage or exterminating the pest, called the Gypsy Moth Commission, which publishes also elaborate reports from year to year, full of interesting observations.

There are 2 practical questions that call for consideration in this connection. What is the damage that insects do? And what are the means of combating them?

There is a big volume by A. S. Packard, published by the United States Entomological Commission, on the insects injurious to forest and shade trees, which details the

particular kind of damage done by the insects enumerated. There are 3 kinds of damage to be differentiated, namely, damage to the wood, damage to the growth, damage to the life of the tree. Naturally, the last kind is the most serious, because it destroys without chance of recovery. Fortunately, there are but few pests that cause death directly. The majority only undermine the vigor or constitution of the tree, though a continuance, a repetition or a renewal of the attack from new pests may eventually kill the tree.

The most dangerous and insidious enemies are the bark beetles, which, boring between the wood and bark, destroy the cambium layer and the very life of the tree. But, as a rule, they follow only as a second to the first and more conspicuous invader, the defoliator. These defoliators, of which the gypsy moth is one, are, naturally, the most annoying in the case of ornamental trees, and they prepare the opportunities for other pests also dreaded by the forester, although the actual damage to the tree is only in checking its growth, to some extent, if repeated or thorough defoliation occurs, undermining its constitution. Numbers do the job! As long as there is no extraordinary development of the pest, the small damage is readily healed, but there comes from time to time a season when the development of insects is unusual and these are the trying ones. Each insect has its enemies which feed on it, and as a rule the enemy develops in similar ratio to the host, but when this balance in nature for some reason is disturbed, then comes the danger.

Here lies one of the philosophies that must help us to discuss the means of fighting the pest: namely, the favoring of the enemies. This may go so far as abstaining from the killing of the host, for thereby we may, if the enemy be a parasitic animal, developing and living on the host, as the ichneumonids do, destroy the enemy at the same time. Who can tell whether if the Gypsy Moth Commission had not tampered with natural developments, the pest would not have run its course and without expenditure of money have died out by natural causes?

There is, however, one kind of enemy which we can foster without saving the enemy, namely, the insectivorous birds. There is closely connected with the preservation and civilizing of our forests the call for the preservation and protection of the bird world, which will save hundredfold in expenditures for insect fighting.

The curious thing about this particular gypsy moth is that in its native home it does so little damage that it is almost unknown, or is at least treated as a secondary enemy, and the forester becomes acquainted with it hardly in any other way

than in the literature or study of insect collections.

This fact that a minor nuisance can become a greater nuisance, if conditions change, is significant for the future of our forests, for while at present insect damage is of small moment compared with the other causes of destruction, it may become a fertile source of danger when with increased cultivation of the forests the opportunity for damage is increased, so it may be said in future: When we had no foresters we had no insect pests in the woods; now that we have foresters the woods are full of pests.

AMERICAN LUMBER IN EUROPE.

One often hears or reads the misleading statement that forestry is only a modified form of lumbering, and that the forestry systems of the future will be simply an outgrowth of the lumbering systems of today. Lumbering, or forest utilization, is simply the tail end of forestry. The lumberman mines the store of wood which nature has spontaneously raised for him. The time is coming when this supply will be exhausted, and it will be necessary to plant new forests or to gradually improve or renovate the mangled forest lands which the lumbermen leave. The lumberman practices just the opposite of forestry. When the forester cuts a tree he has always in mind something beside the mere reaping of a wood crop. He thinks always of the young trees, of regenerating the forest, of improving and perpetuating it, so it will forever yield an interest on the capital invested. The lumberman cuts always the best, leaves the poorest and has always in mind getting out of it the largest sum possible in the shortest length of time, regardless of the future. If the lumbermen of the United States would agree to cut only the increment of the forest the price of lumber would increase and forestry would become profitable. Many small concerns would have to quit and the profits would be less, but they would go on forever and the capital, or growing stock of the forest, would increase in value. The percentage of forest land in Germany is as great as that of the United States. Every acre of forest land is, by careful management, induced to produce a large crop. By this intensive method the yield is high. Rich families in Europe are quite content to invest their money in well managed forests, because they produce a sure and lasting income.

A good market for American forest products is not lacking. Yellow pine, which grows spontaneously throughout our South, is much admired in Europe and the quantity exported increases every year. Were we to properly exploit our great Southern pine fields so that we could al-

ways supply a large quantity of first-rate material in this line to the people of Europe at a reasonable rate, a good market would be assured because the yellow pine of America is popular there. A house finished with yellow pine in Europe is "luxuriously finished," and it is not uncommon to see a piece of polished yellow pine by the side of mahogany and other precious woods in the museums of Europe.

According to J. G. Stowe, United States Consul General at Cape Town, every sleeper of the 150 miles of narrow gauge railroad in and around the Kimberley diamond mines is of California redwood, which in South Africa is the best wood for such purposes. It is also used in many other ways. Three ships have recently arrived with cargoes of redwood and Oregon pine.

With the prospects of a great market, for many years to come, for such timber, which is so easily and quickly produced in this country, in such far-away countries as Europe, South Africa and the Orient, it is only good business to see that the supply may last forever and that the market may increase instead of having it come to an untimely end in its infancy because of the short-sighted policy of our lumbermen in ridding our country of the best of it in the shortest possible time, with no thought of the future.

SYSTEMS OF FOREST CULTURE.

In Europe where forestry is a great service and art, many silvicultural systems have developed. In addition to several main systems of treatment there are a host of auxiliary systems which are devised to fit almost any condition which may arise. The system of management always depends on the quality of the locality and the purpose of the forest.

We should distinguish first between seedling forests and coppice forests, that is, those which grow from seed and those which consist of the shoots from the stumps or roots of trees which have been cut. Secondly, we should distinguish between pure forests and mixed forests, that is, forests of one species only and forests which consist of 2 or more species. Thirdly, we should distinguish between forests of even age and those of uneven age, or regular and irregular forests. We should distinguish also those trees which require light, which usually form the overwood of the forest, and those trees which endure shade, which usually form the underwood of a forest.

In the treatment of seedling forests we may easily distinguish between 2 great groups of systems, one in which everything is cut clean and the other in which the cutting is done gradually, so the trees which

are left standing may serve to seed and shelter.

In the clear cutting systems regeneration may be produced by sowing seed, by planting young trees or by depending on the winds and birds to sow seed from adjoining woods. The systems in which the forest is regenerated under shelter woods may be divided into 2 distinct classes: First, those which divide the forest into parts, each part receiving treatment in its turn until the whole forest is cut over and regenerated; and second, into the selection system, in which the whole forest is worked over at certain intervals, and in which single trees receive special attention rather than large groups. In the former the condition and age of the trees of each section are more or less uniform, while in the latter all ages and classes are mixed together.

All these systems have certain advantages and disadvantages, and in future systems will be defined one at a time so that any person deserving to place his land under forest regulation may find something of practical value.

THE TIME ELEMENT.

One day while working at the sawmill, just after noon, not a breath of air stirring, I heard a crash, which I soon located. On the hill about 100 yards away a large red fir tree had fallen. It had been burnt out at the roots years before. Will some one explain why it should have stood through many storms and then have fallen during a calm?

S. N. Leek, Jackson, Wyo.

ANSWER.

It is always the last hair that breaks the camel's back, though it may be difficult to determine when the last hair will be put on. So with a tree in the condition described; the storms have been shaking it, loosening its fibres, until a small effort, a breeze which is hardly perceptible on the ground, would break it. The last storm did not quite accomplish the final result, yet has changed the position of the load, perchance; and then the time element, the length of time that the unbalanced load is statically active, suffices, without additional motion or swaying, to accomplish the failure, as the last fibre has become tired and gives out.

Just so a beam loaded to within a fraction of its breaking strength and kept under this load will finally give way, and hence an allowance must be made in the so-called "factor of safety" for the time element.

Another good illustration of the value of this time element is the possibility of rapidly running over cakes of ice or logs in the water, which would drop the less agile runner, because he allows the load too long to be active.

BOOK NOTICES.

A NOTABLE BOOK ON AFRICAN HUNTING.

In many respects Mons. Edouard Foa's book, "After Big Game in Central Africa," is a fair model for books of its kind. It is so seldom that the adventures of a French sportsman are translated into English that I took up this handsome volume with keen interest, read it greedily, and laid it down with a feeling of profound satisfaction.

In nearly every respect it is a genuine treat. It is bound with sense and good taste, its edges are cut, thanks to the printer! its paper and typography leave nothing to be desired, it is crowded with illustrations which show that only the finest have been chosen out of a large collection, and the text is as interesting as "David Harum." There are measurements of big game in full detail, much valuable information about hunting and camping, no end of facts relating to the habits of African wild beasts, and the only poor features about the whole book are the route map and index, both of which are inadequate for such a work.

M. Foa is really a hunter of a new type, and in order fully to appreciate the man, the reader should peruse every line of Mr. Lee's introduction. Of the author's 14 years in Africa, the last 6 were spent under the patronage of the French Government, which supplied the funds for the best-managed expedition that ever went to the dark continent. M. Foa applied to African travel the same painstaking forethought and study, the attention to every detail, the choice of companions, and the tireless energy combined with splendid physical endurance which gave Nansen his success in the dash for the North Pole. But there are others who could do such things if funds were equally plentiful and cost a matter of no consequence.

The author's last expedition consisted at the outset of 380 men; and he crossed Africa. He does not, however, for one moment attempt in the volume before me to describe his journey. His very extensive geographical work, and his astronomical and meteorological observations are not even mentioned. This is a book about the most interesting of his hunting experiences, and the finest of the big game that fell to his many rifles. The pictures of his colossal elephant (page 258, 12 feet $2\frac{1}{2}$ inches high at the shoulders!) his giraffe, rhinoceroses, buffalo and antelope fairly make one's mouth water, and I am heartily glad that through M. Foa so many fine African animals found their way into the zoological museums of France. It is, however, a source for keen regret that all the au-

thor's beautiful photographs of big game are representations of dead animals. Had he but caught the spirit of the West for photographing live animals in their haunts, what a wealth of negatives he could and would have secured.

After Big Game in Central Africa. By Edouard Foa, F. R. G. S., with 71 illustrations and a sketch map. Large 8vo. pp. xxvii, 330. London: Adam & Charles Black; New York: The Macmillan Co. Price, \$2.

A BOOK ABOUT EUROPEAN BIG GAME.

One of the most interesting of recent publications is entitled "Die Hohe Jagd." This beautiful book contains over 500 pages, is published by Paul Pavey, in Berlin, and contains contributions by at least a dozen distinguished personages. It is adorned by many beautiful illustrations, some of which are colored. The introductory chapters relate to dogs and guns. The first animal described is the "elch." This is practically the same as the American moose. The term "moose" is strictly American and comes, it is said, from the Algonquin "musu," which means "woodeater." Then come descriptions of the red deer, fallow deer and roe deer. These are followed by descriptions of the wild boar, chamois, wild goat or paseng, and the mufion, a wild sheep of the mountains of Sardinia and Corsica. Kangaroo, bear, lynx and seal hunting are also described.

This book also includes a great deal of interest in reference to crane and bustard shooting. The bustard is a bird related to the plover and the crane, and is of high repute as a game bird.

Then come interesting descriptions of the famous "auerhahn," about which one hears so much in the Black forest, the "birkhahn," "haselhahn," and pheasant. The American turkey is also described. Everywhere throughout Europe one sees many pheasantries where pheasants are propagated on a large scale and where large tracts of land, planted with the proper species of food and shelter plants, are managed for the purpose. Hunting in Europe is not everybody's privilege. In America hounding, etc., will soon exterminate all game. In a short ride outside of the city of Munich last winter I counted 35 deer within 2 miles of the city limits, feeding unconcernedly on the firelane along the railroad track. They are almost domesticated, and it is not uncommon for a well-to-do farmer to have his own private herd.

Game and fisheries in European forests are generally included among the minor

produce of the forest. The right to shoot is leased under restrictions for a certain period or is exercised by the foresters in charge, who sell the game and credit it to the state or commune.

Although large game, such as deer, do considerable damage to the forest, it is generally conceded in Europe that the maintenance of a moderate number in the forest pays. Experience there has shown that 2,500 acres will support 16 herds of deer, and that the damage resulting to young growth therefrom will not be serious. The tender shoots of young trees are often protected by cotton tow. The deer gets the tow tangled in his mouth and dislikes it to such extent that trees thus treated are usually not molested.

The League of American Sportsmen is none too soon in adopting strenuous measures for game protection and propagation. Otherwise many of our most valuable wild animals, including those yielding food material and pelts as well as sport, will soon become extinct.

In an interesting book on the Domestication of Animals, by Professor Shaler, of Harvard University, is noted the fact that for the last 300 years but little attention has been paid to the domestication of our wild animals. We should consider the possibility of domesticating many of these before it is too late. He suggests that in the "great Lone Land" of the North many of our fur-bearing animals might be subjugated with profit. It has been said that

the mink, when reared for its fur, is as profitable as any of our domestic animals. "The domestication of the beavers to the point where they would tolerate the presence of man should not, provided they could be protected against the depredations of poachers, be a matter of any difficulty." The beaver is bred by Mr. R. Stuyvesant on his estate near Allamuchy, New Jersey. Many large trees have been felled by this active little worker.

"Among English Hedgerows" is a delightful outdoor book from the press of Macmillan & Co., lavishly illustrated from photos and drawings of English rural scenes. Clifton Johnson tells in a charming, informal style of the daily lives of English peasants and dwellers in villages, beside giving "A Peep at the Gentry," "A Glimpse of the Lake Country," views of castles and cathedrals, and touching on many other peculiarities of English life, which make it interesting to Americans. Price, \$2.25.

Macmillan & Co. have also recently published "More Pot-Pourri, from a Surrey Garden," by Mrs. C. W. Earle. This is indeed a medley, treating of everything from plants to tuberculosis, from Cowper to acetylene gas. The index is by months, the subject matter really a sort of diary, kept by an accomplished, clever woman, thoroughly alive to all topics. Price, \$2.

A CONTRAST.

I. N. CAMERA.

Slip leash! and give the dogs a run,
If that be the need of your sport or fun;
But give me a rifle trim and true,
And I'll hunt my game the wild woods
through.

Ye may ride o'er moor with loud hurrah,
And view the hounds and fox afar;
While I noiselessly part the brush aside:
(In yonder glade stands the forest's pride).

Now scatter and whoop in your steeple-
chase!
You've taken the fence, and marred your
face,
While I draw fine bead on noble buck:
I press the trigger; the ball has struck.

Up! up! my noble bespattered count;
But see! you cannot o'ertake your mount.
I've no steed to pursue; my buck lies
dead—

The leaden missile went through his head.

Your winding horn may be music to you;
The fox has pangs the long day through;
While of danger to him my buck knew not.
He but bowed to the ball and fell on the
spot.

Ha! your dogs are close, but the day is
done;
Poor Reynard has died more deaths than
one;
I'll stick to my rifle; 'tis a merciful piece—
Would that you'd see it and give game its
release.

A BEE HUNT.

EDWARD E. ROY.

In August RECREATION F. S. Tufts, of Winchester, Mass., asks how to trace wild bees to their hives. Take an ordinary chalk box, about 4x8x4 inches, with a slide cover; cut a 2-inch square hole in cover; fasten a piece of glass on under side to let in light; put in bottom of box a piece of honeycomb about 4 inches square, and you have a bee box. Next fill a pint bottle half full of granulated sugar and fill up with water. Let it dissolve and add 10 drops of oil of anise. You are then ready for work. Never keep this mixture until it sours. Always make new. This we call dope. Always wear a felt hat, as it holds scent longer. Treat the hat to 25 drops of oil of anise, and pour some dope on the comb in the box.

I would advise a beginner to knock the bee into the box with the cover; then slip the cover on and put your hat on the glass to darken the box. In a moment or 2 the bee will begin to suck the dope. As soon as he does, take the cover off from the box. When he is loaded and leaves the box the first few times he will fly in a circle, but after he has made 5 or 6 trips he will make a bee line from the box to the tree. By that time you may have 25 or 30 bees to watch, instead of one, because of the oil of anise in your dope. The moment the first bee deposits his first load the other bees scent the anise, and 2, 3 or more follow him. The oftener they come the more bees you have. There are 2 ways to line a bee. One is to watch which way he goes from the box, and the other to watch which side of the box he comes back. He will always go over the box from the tree and turn back to the box. The best way to watch them is to lie on the ground and observe one bee as he leaves the box. If you have 2 lines or more the bees will fight on leaving the box. When there are 15 or 20 bees working in the box, slide the cover on and shut them up. Take your box due south about 40 rods, set it on a high stump, and open it. Bees go like a flash up in the air, in circles. No one could follow them, but soon they come one at a time back to the box. They will not miss you if you take the box from one place to another. They all go back to where the box was, and then follow in a zigzag tack on your trail. When they get settled again and are working well out of the box, make another move, 20 or 30 rods on the line, until you observe that the bees go back North instead of South. Then box them and make a set-off 20 rods to the East. Your line will then run West.

Sight your South line and your West line together, and you have run your bees home. You can tell when you are close to a tree by the number of bees you have working. If bees work fast there is not much honey in the tree, but if slowly, make up your mind their tree is full.

If a bee alights on your face or hand let him alone. He will not sting unless you fight him, and then you generally get the worst of it.

In October, 1895, my friend Kin and I started for a bee hunting trip, which lasted 9 weeks. One day we ran across an old man and 2 boys making hoops. They were much interested in our scheme, so we invited them to go out with us that night to see us cut a bee tree. We took with us some sulphur sticks, made by winding a rag around the end of a pine stick and soaking it in hot sulphur. One of these sticks lighted and put in a tree will kill all the bees. We also took an ax, a saw, 3 lard cans, and a bundle of dry wild grass. When we reached the tree Kin said to the old man,

"We have to climb this tree and light a sulphur stick. The bees are only up about 15 feet."

Both the young fellows wanted to go up, but the old man insisted on climbing. Said it would remind him of the days when he was a sailor. We put the lantern on a pole, and I held it up so the old man could see where the bees went in. Kin told him to light the sulphur and jab it in the hole. The minute he struck a match a bee struck the end of his nose, and how many more bees found him we were never able to learn; but down the tree he came like a red squirrel, and I never heard a man swear as he did. I have heard lumber Jacks in Northern Michigan swear by note, but they wouldn't stand as much show against that old man as a duck would with 20 game hogs. His 2 boys began to make fun of him, and Kin and I laughed so hard we could not pull the saw.

Finally we got the tree down. We tied the legs of our trousers tightly around our shoetops, and our coat sleeves around our wrists, so no bees could get under our clothing. It was always my lot to have to take the honey away from about 2 bushels of those mad devils. Kin took one side of the tree and I the other. We sawed about halfway through, above and below where we thought the honey was, and I took the ax to split out the slab of wood and let the bees out. Kin told one of the boys to

hold the lantern so I could see. A bee hates a light worse than anything. I struck a blow with the ax and let out about a quart of bees. Every one of them struck that lantern and that boy. They got inside his clothes, and he danced a pigeon wing that would have made his fortune on a variety stage. He dropped the lantern and made for the brush, and the old man laughed until he could be heard a mile. Finally, Kin brought the dry grass and lit it as I split the slab out of the tree. All the bees dashed at the fire to fight it, and

that finished them. Then I took up the honey. There were nearly 100 pounds of clear white comb, and a lard can half full that we had to strain.

It seems cruel to burn the bees, but they would die anyway when robbed of their winter's store. October and November are the best months for hunting them. Never box a bee that has beebread on his legs, for he will eat what he wants and never return. Always catch the bee that has no yellow on his legs, for he is the honey maker.

THE HARMLESS HOG.

W. H. THOMPSON.

The game hog sat in his leaky tent
Smoking his gummy, old clay pipe,
And he wrote: "I have bagged on the
marsh to-day
Twelve ducks and a hundred and four-
teen snipe;
And my high bred Laverack setter, Prince,
Made a royal stand on a Sora rail,
With eighteen snipe in his mouth, and a
brace
Of teal on the tip of his rigid tail."
Yet the only dog this hog ever owned
Was a bob-tailed, lousy, mangy cur,
And the fraud couldn't hit the side of a
barn
At fifteen yards with a howitzer!

The game hog sat on a muddy log,
With a sapling pole and a cotton thread,
And he baited with slimy salmon eggs,
And yanked the fingerlings over his head.
But he wrote that night of the "maddening
rush"
Of the "four pound trout" in the "moun-
tain flood,"
And the "willowy bend of his five-ounce
rod,"
And the "thrill" that ran through his
"sportsman's blood,"
As the "good reel whirled" and the "silk
line hissed."
Till "fifty battle minutes were spent."
While the fish "leaped four and a half feet
high."
(By barometrical measurement!)

The game hog bought for seventy cents,
From an urchin who plied his trade for
hire,
Some half starved bass, caught over their
nests
By a spoon-hook dragged at the end of a
wire;
And he hung the fish with an artist's skill,
And he stood in the rear so cunningly
That he made each bass in the photo show
Six times as large as it really was.
Then he told in the next A. D. G. H.
Of "A Grand Day Spent with the Finny
Kings,"
Where the "great pools swirl in the track-
less woods
And the hermit thrush in the green
gloom sings."

I pray you be kind to the harmless hog;
He dotes on his lies and they don't hurt!
His pen is mightier than gun or rod
For his "new things are good," and his
"good things new."
No hunter or angler is e'er deceived
By the pictures he takes, nor the tales he
tells;
Only the greenhorn is lured away
To his "marshy moors" and his "bosky
dells;"
And I cheerfully "dig up" four plunks a
year
And wait each month with my heart
agog.
For the old fish picture with man in the
rear.
And the dear old lies of the harmless hog.

"Water," said the temperance orator, "is nature's own beverage. It comes to us from the clouds. If, instead of water, it were to rain beer——"

"You would be too full for utterance," interrupted a voice from the gallery.—Chicago News.

THREE DAYS IN THE HOT COUNTRY.

F. S. ONDERDONK.

On the 11th of April last, in company with Rev. N. E. Joyner and Ernest Brunt, I left San Luis Potosi, Mexico, on the 6:30 train for Micas, a small station on the Mexican Central railway, between this place and Tampico. For days before our hearts had been fluttering with the prospect of fine sport.

After 8 hours' ride through some of the grandest mountain scenery in the world, we reached our destination. The Pullman porter told us that only about 2 miles back he had seen 3 deer standing within rifle shot of the train, and that they did not move when we passed. We left our luggage in the station house, and started to explore the country. High palm trees abounded, and some of the thickets were impenetrable, though there were many open places. The mountains towered far above us, and the trees thereon were alive with various kinds of parrots and other birds of rare plumage.

We had not gone far when we heard turkeys gobbling in the mountains. They were out of our reach, however, and we were out for deer. When we reached the point indicated by the porter we left the track, and had gone only a short distance when we saw 3 white tails go flapping over the bushes ahead of us. The inexperienced hunters did not get a shot. We only expected to get the lay of the country that afternoon, and night was fast approaching. We decided to return, and on our way a rustle in the bushes ahead attracted our attention. In an instant a doe sprang out and stopped in a small opening about 60 yards away. My heart jumped. The darkness was approaching, the sky was clouded, and the deer's rump was toward me, with a partial view of the left side. I raised my .38-55 and fired. I did not see the deer after pulling the trigger. I went to the spot, searched in vain for blood and deer, and on account of dense thickets gave it up, concluding I could not hit anything anyway. While hunting over the same ground later I found my deer. The ball entered the left side, near the flank, and came out at the right side of the neck. If I had been using a steel bullet with lead point the animal would probably never have left the spot.

The next morning breakfast was over

and we were on the hunting ground by daylight. Joyner and I stayed close together, and Brunt took his own course. We saw a number of deer, but got no shots. We called a large turkey up close and I fired, missing. I had forgotten to lower my sights, which I had previously raised for long distance. We returned to camp at noon, leaving Brunt in the field.

After dinner we went down the river for turkeys. Within an hour 2 large gobblers had fallen to Joyner's Winchester shot gun. Having about as much game as we could carry up the mountain, we returned to camp. Brunt had been successful.

A deer, which he had killed at sunrise, hung on the station house gallery. He had been between the deer and the sun and the animal could not see him. The young doe came bounding toward him, and he let her have a .25 calibre steel bullet, lead pointed. At the crack of the gun another deer appeared. Brunt pumped in another shell and laid it out. Seeing it bleeding and kicking, he left it and went to search for the first one shot. It was soon found, and he returned to the place where he left the other one, but it was not there, nor was it found until the next day.

The day following we were early in the field. Joyner fired at a buck, but failed to stop him. I saw 2 together and fired at long range, missing. I had gone but a short distance when another young buck came out before me. At the crack of my rifle he dropped, and I soon had his jugular severed.

Thursday was our last day. We walked up the railroad track and had not gone 20 yards away from it when 5 deer sprang from their cover. Joyner followed them. At a distance of 65 yards one of the bucks stepped into an opening. A shell from Joyner's gun brought him down. The report of the rifle excited the curiosity of the remaining 4, and one of their number, an immense buck, stepped into the same place where the other had fallen. A second shot from Joyner's rifle laid him out also. The 2 shots were only a few seconds apart.

That ended our hunt. We had killed 6 deer and 2 turkeys, beside small game, such as blue pigeons, squirrels and quails. That country abounds in pheasants, turkeys and other game.

Jaggs (reading): "Here is a weather prediction in which it is spelled w-e-t-h-e-r."

Naggs: "Then that's a sign of a bad spell of weather, isn't it?"

A CLEAN MISS.

G. L. CABLE.

Last September I went up to Beaver, N. Y., for deer. I landed from the train about 5:30 in the morning, went immediately to the hotel, got on my rough clothes, and started out. I went Eastward, hunting carefully 4 or 5 miles, but saw no game. About 8 o'clock I was walking rather fast and carelessly when I heard a rustle to the right and slightly behind me. I turned just in time to see a small doe finish her first jump and start on her second, which took her out of sight into the bushes. Then I heard 3 thumps, and my first deer was gone before I realized it wasn't a jack rabbit I had jumped. I followed the track half a mile through the woods before I gave up. Then I returned to the hotel for breakfast.

I drifted around in the afternoon and watched awhile in the evening, but saw no more deer.

I then arranged with a guide by the name of Hard to go out the next morning. He proved a fine fellow, a Yale graduate, who went up there 3 years ago for his health and turned guide more for pleasure than necessity.

It turned very cold in the night, and there was a heavy frost at 5 o'clock in the morning, when we made our start, after our ham and egg breakfast. We went over about the same route I had taken the day before. When we reached the place where I missed my first deer I was just ahead of my guide, whom I called the Professor, and a doe loomed up right in my path, 50 yards from me. I raised my rifle, glanced over my shoulder at the guide and said:

"Shall I try?"

"Yes."

I drew the rifle down as steadily as if aiming at a target and let go. The deer gave a jerk and a shiver, but did not run, and the guide said,

"You got her."

But I didn't. She turned, threw up her tail and started, just as the guide also made a clean miss. We followed and saw the doe standing not 20 feet beyond in the bushes; but she dashed off through the

woods before we could get another shot.

Now for the excuse. Every one who makes a clean miss, as I did, wants to make an excuse. I do not lay the blame on myself or the gun, or even the deer. She certainly did all she could, and I held as true and steady as a rock. The only thing I can blame is those soft lead cartridges. They will not carry 100 feet without falling one foot. I did not get a chance to target the gun until after I missed the deer. Later I had a crack shot test it as well as myself and here is the result at 150 feet: With sight down to last notch, fall $1\frac{1}{2}$ feet; with sight up to about middle, 8 inches; with sight up to top notch, $3\frac{1}{2}$ inches.

I evidently shot between the legs of our shy friend, but I will not do it again. I now have some metal jacketed soft nosed bullets, and here is the result of the targeting: With sight down, 150 feet, above 3 inches; with sight down, 200 yards, no rise and no fall. Those cartridges I used are short range, containing very little powder and very soft lead. They did not hurt the gun though, for I wiped it out and it is as clean and as perfect as when it left the factory.

I became reconciled to the miss, for we followed the doe and jumped her again, but did not get a shot. While we were waiting for her to get over her fright something jumped out of a tree top and I covered it, but saw it was a fawn only in time to withhold fire. The little fellow stopped and turned toward us with ears up as if to say, "What for you all want to kill my ma?" So I contented myself by just drawing the sights on the little thing. It stayed there fully 5 minutes, occasionally changing its position to get a better view. It was the prettiest sight I ever saw. Soon it got tired and trotted away.

We saw nothing more as we circled around to a camp where we had a venison and grouse dinner. Two or 3 deer have been killed here since I came. One was a 3-point buck. They are not numerous, as there has been a great deal of hunting here since the season opened.

"Ah, here is my friend, the dodo," affably spoke the J. Fenimore Cooper Indian. "We can sympathize with each other, friend dodo. We are both extinct."

"There can be no sympathy between us," coldly replied the dodo, turning its tall feathers on the other shade. "I really existed once, and you never did."—Chicago Tribune.

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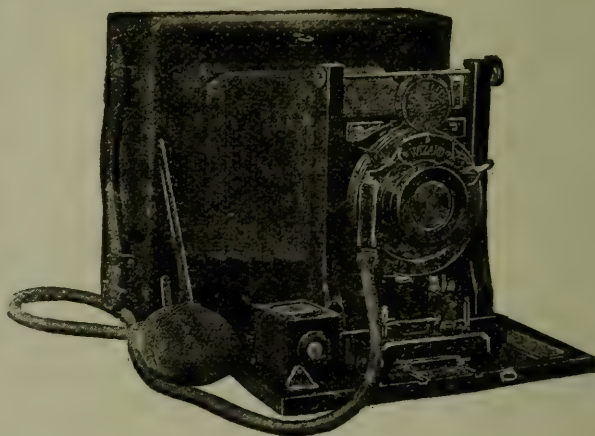
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CRESSKILL, N. J.

AMATEUR PHOTOGRAPHY.

"A Bird on the plate is worth 2 in the bag."

CAMERA NOTES.

G. S. PORTER.

The markets are flooded with new developers. Pyro is still 35 cents an ounce, and almost all professionals, as well as expert amateurs, use it.

This is the time to catch exquisite landscape effects. There are nearly always clouds in the winter skies. Negatives of these should be developed and preserved.

Why don't you write to the Ray Camera Company about their offer of a free round trip ticket to Paris in 1900? See their ad. in RECREATION and mention it.

Oliver Lipencott, of Los Angeles, California, whose work in photographing the Grand Canyon of the Colorado is well known throughout the country, has again entered the canyon, with a complete outfit for panoramic work. This consists of Zeiss Anastigmat lenses of various series, from high speed planer $6\frac{1}{2} \times 8\frac{1}{2}$, working at F4, into the wide angle series. Mr. Lipencott's work has been made possible by the development of the liquid rayfilter, which he always uses. The failure of many expert photographers who have attempted this subject has been due to the lack of a suitable rayfilter for illuminating the haze which continually fills the canyon. Mr. Lipencott expects to return from this trip in time to participate photographically in the snake dance of the Moqui Indians, where he expects the high-speed shutter to do effective work. As this dance begins only an hour before sundown, it has heretofore baffled photographers.

Western readers of RECREATION may be pleased to learn that they can get rayfilters from Woodward, Clark & Co., Portland, Oregon, without waiting to send East.

Wash bottles that have contained essences with sulphuric acid and rinse well with water. Bottles that have contained resinous substances, with potash or soda. Rinse with alcohol and then with water. Bottles that have contained fatty matter should be washed with benzine and rinsed with water.

A plate can be intensified by drying it in the warmest place that will not injure the emulsion and in a slight draft.

Clean lenses by dusting with a sable brush and swabbing with absorbent cotton, wet in one ounce alcohol, 3 drops nitric acid (C. P.) and 20 ounces distilled water. Polish with a dustless chamois skin, kept only for that purpose, in a tight box.

Pyro, sulphite of soda and salsoda are the staples of the best developers. Pyro gives strength. Sulphite of soda preserves the pyro and prevents yellow stains. Sal-

soda yields detail by opening the pores of the emulsion and allowing the pyro to act more freely. These 3 in proper proportion, with a correctly timed negative and a dark room temperature of 70 to 75 degrees F., will yield a good negative in $3\frac{1}{2}$ to 5 minutes. Too much pyro gives a contrast, with proper time of development; too little gives a weak, flat negative. Too much salsoda clogs up the negative by forcing it. Too little causes contrast and slow development.

Pyro stains can be removed from the finger nails by a strong solution of chloride of lime, followed by a dilute solution of citric acid and a thorough rinsing. This may also remove the skin from fingers.

Plates that are properly exposed, developed and dried need no intensification. But how many amateur plates are properly exposed? To test the effect of intensification, especially with snapshot plates that are universally weak from under exposure, pick out a plate that would fill all your best ideas of a good picture if it only had a little more density and contrast and give it the following treatment, using neatness and despatch, with plenty of water:

Wash the plate $\frac{1}{2}$ hour in running water, to soak up the coating. Then lay it in a 5 per cent. solution of alum for 10 minutes. Wash off the alum thoroughly. If you do not it will turn the plate yellow in the intensifier and ruin it. Then immerse the plate in solution of

Bichloride mercury240 grains
Chloride of ammonia...240 grains
Distilled water 20 ounces

Leave the plate in this solution until it fades to a milky, opalescent white. The longer it is left the greater will be its final density. Do not be frightened when the color begins to fade and think you have ruined the plate. It will come all right in the end. Wash thoroughly. Then flow over it for a few seconds a solution of

Chloride of ammonia ...240 grains
Distilled water 20 ounces

and wash well once more. Then place in the final solution,

Strong, clear ammonia...1 dram
Distilled water8 ounces

and leave until the white image has darkened through to the back of the plate and the whole plate assumes the required degree of density. Do not make it too dense. A few trials will teach you just what you want. Give the plate a last thorough washing, and set it up to dry in the warmest place that will not injure the coating, and in a slight current of air if possible.

This formula will intensify 4 plates; $\frac{1}{2}$ the amount will answer for one. New trays must be used and the solutions kept flowing over the surface of the plate as in de-

velopment. If 2 or more plates are intensified in the same chemicals they must be put through the entire process one at a time. Many apparently useless negatives may be redeemed in this way. Few negatives are made, except in the open or under skylights, that a little intensification will not improve; and it is the only salvation for most snapshots and plates weakened by development in warm weather.

WINNER OF SECOND PRIZE.

The taking of the "Rocky Mountain Big Horn" photo was one of those lucky accidents that occur to a man but once in a lifetime. I was a convalescent and was directed by the doctor not to engage in any hard work for at least a month, so I invited a friend of mine, Mr. Wm. Hyland, of Idaho Springs, to spend a few days with me at Chicago lakes. We took a small Eastman kodak with us, and amused ourselves taking such pictures as we could get. We tried to take some real birds' nests for RECREATION. On the lucky morning we started out with a film roll, of which all but 4 lengths had been exposed. We had made 2 exposures, eaten our noonday lunch and started back toward the lakes when we saw a white-crowned sparrow's nest, at which we took a snap. Immediately after this we saw a Wilson warbler among the dwarf willows, and we both began looking for the nest.

Mr. Hyland went up one little draw and I went to the next, some 40 yards away. In about a minute I heard a strange noise and looking around to learn the cause I saw a band of big-horns, about 400 yards away, running swiftly toward me and breathing so hard we could hear the sound at that distance. I called to Hyland to get the camera ready. Not understanding me he started to come to me, but I motioned him back where he was concealed from the approaching game. I repeated the call, "Get the machine ready," and that time he heard me. He took the kodak from the carrying case just in time to see the first sheep cross the draw, within 25 feet. It ran a few feet farther and stopped. The next one was but 20 feet behind and Hyland held his fire until both were visible through the viewfinder. Neither of them had seen him. They were looking directly at me. When the shutter snapped they both jumped and came within 25 feet of me. There they stopped again and looked directly at me as though wondering what that was in brown coat and hat. They were blowing hard and the ram had a bunch of froth under his chin. This shows in the photo. After looking a moment both turned back, passed Hyland at the same point where they were standing

when the exposure was made and returned to the rest of the band, 40 yards away, where they stood a minute longer, looking with curiosity at the intruders. There were 9 in the band, 8 males and one female; at least, one without horns. We had used the last film in the roll, so we went under a large rock, took out the roll and put in a new one. Knowing we had a rare picture we took great care not to have it spoiled. All that time the sheep were walking farther away, stopping every few feet to take another look. Unfortunately they went out of view before the next roll was ready. We returned to the cabin and did not breathe easily until we had negatives developed.

We then found our birds' nests did not come out, as we had held the camera too close and blurred them all. The lake and mountain views were all right. We felt amply repaid for our work in securing this one picture for RECREATION, even had all the others been failures. We have both hunted on that ground many times before. That was the first time we ever saw mountain sheep there, and to get a photo of the 2 leaders, at 25 feet, was more by good fortune than by good hunting.

Evan Lewis, Idaho Springs, Colo.

UNCLE SAM COLLECTING PHOTOGRAPHS.

The annual report of the Adjutant General contains some figures and facts of interest to photographers.

Uncle Sam has never before figured in the light of a camera fiend, but the report discloses that an enormous war album has been made, which in time is destined to enrich the libraries throughout the country.

"In reply to a circular dated December 12th, 1898, sent out from this office to officers and men carrying cameras during the war with Spain, there have been received over 500 negatives and 300 prints of Porto Rican subjects, over 700 negatives and nearly 400 prints of Cuban and reserve camp subjects, and nearly 150 negatives of Philippine subjects, from which something like 350 Porto Rican, nearly 500 Cuban and a few Philippine subjects have been chosen to make the final selection for an album. These negatives and prints were then returned to their owners. There are still on hand, from which to make further selections, over 200 Porto Rican negatives, 350 negatives and nearly 700 prints of Cuban and reserve camp subjects, and over 600 Philippine prints.

"The work so far has been to make selections from the negatives and prints sent in, which are usually small. The ones selected are then enlarged to 11 by 14 inches. After having collected and enlarged everything desirable, it is the intention to retouch these enlargements and then make nega-

tives from them for the purpose of making the final pictures. This is necessary on account of the small size of the negatives and prints received, and on account of the poor quality of most of them, as they have been taken under disadvantageous circumstances, often by persons inexperienced in the handling of their cameras, and at times under circumstances when it would have been impossible to have taken any other kind of pictures. After obtaining as much material as possible, the final compilation will be made.

"This work is important, having already served to determine disputed questions. It is thought that in time the collection will be of such value as to induce Congress to publish it for distribution to libraries throughout the country."—The Professional Photographer.

DEVELOPING LARGE BROMIDE PRINTS.

After 2 or 3 years' trial I have concluded that the best way of developing bromide prints of large size is by means of a brush. By that method only could I get complete control over the finished picture, and how many negatives are made that have the right density all over? Most negatives have some small part that would be better either printed darker or lighter.

The way I have found most convenient is to use a board instead of a dish, such board having an edge all round not more than $\frac{1}{4}$ inch high, which is just to keep the developer from running off and making a mess. The board is water-proofed by varnishing 2 or 3 times with a mixture of paraffin wax and benzine collas. This must be done out of doors, on account of the inflammable nature of the benzine.

The print is laid on this board, and mopped with water on the face, and then on the back. It will then lie flat. The board is then tilted, and the excess water runs off.

The developer is then applied in the same way. This being weak, there is plenty of time to bring up any part that requires it by using a stronger developer, applied locally by means of another brush, and any part that is rather quick can be slowed down in the same way, using water instead of developer. As soon as development is complete, the print is transferred to the fixing bath, without washing.

Always use a fresh fixing bath with each batch of prints, as a bath discolored with oxidized developer has a reducing action on the print.

The developer I like best for this work is as follows:

- (1) Hydroquinone 160 grains
- Bromide of potassium.. 20 grains
- Water 20 ounces

- Sulphite of soda 2 ounces
- (2) Soda hydrate 80 grains
- Water 20 ounces

Weak developer—I part No. 1, 1 part No. 2 and 2 parts water.

Strong developer—I part No. 1, and 1 part No. 2.—The Professional Photographer.

A FEW NOTES ON RETOUCHING AND SHADOW PICTURES.

T. A. MORGAN,

In the Professional Photographer.

Retouching is one of the most important branches of photography. No photographer can succeed unless he be a first-class retoucher. I always use a 34 pencil for general work, but of course have all kinds on hand to be used when wanted. Do not put on much lead. What you do use, put on as lightly as possible. Don't do too much work on a negative. The old billiard ball retouching is a thing of the past, and the aim now is for artistic retouching. Before you finish a negative always sit back and inspect it from a distance. You can see large shadows that you can never see if you are close to it. These can be removed by a few strokes of the pencil, and then you get that beautiful soft finish, which is the aim of modern retouching. A few light strokes of the pencil in the right place will do more good than 3 hours' hard work by an incompetent retoucher. A sharp knife is a wonderful help, and almost anything can be done with it. Never change the likeness of the face, but remove all blemishes. Be sure to cover the collar bones, and remove all freckles from the faces of the ladies. Always aim to make people better looking without changing the likeness. I find the outline or shadow picture quite a money making specialty. I make these in the following manner: Pose the sitter before a white background as for an ordinary profile. Then fire a flashlight behind your sitter so as to get no light between the lens and the sitter. Develop with a developer strong in pyro, to give contrast. You then have a negative with clear glass in the face and with a white background. If it is not white enough only a little time is needed to block it out with India ink and then proceed to finish as from any other negative. By my method it is necessary to make these pictures after dark.

PHOTOGRAPHY IN THE BOER WAR.

One of the most remarkable innovations in warfare is being tested in South Africa. Lieut. Foulkes, a young officer of the Royal Engineers, has been detailed to employ photography as a means of indicating the exact position and formation of the enemy. He uses a telephoto equipment of his own

invention, and is a special aid on Gen. Buller's staff.

Heretofore, reconnoitring parties have returned from that hazardous duty with only a roughly sketched map, showing the general distribution of the enemy's lines. The main objection to photography is the time occupied in developing plates. This is said to have been overcome by Foulkes' method, for in recent trials he had prints ready in 7 minutes after focussing. It is thought that photographs thus secured will be of great value in verifying routes and preventing columns from losing their way; also in rendering them practically independent of guides when advancing on unknown ground.

Foulkes carries the equipment on his own and his orderly's bicycles, which are painted khaki color. The camera is a simple looking affair, made for hand work, but is fitted with the most expensive devices. Foulkes also carries a Mauser, a revolver, and a carbine.

The few military experts who know the object of Foulkes' mission are looking forward with keen interest to the spectacle of battle plans being formed on photographs taken, developed and printed at the farthest outpost, probably within easy range of the Boers. Lieut. Foulkes experimented with this class of photography while serving in Sierra Leone, in the Huttax expe-

dition, and secured results which prompted the War Office to send him to South Africa. —New York Herald.

HOW TO MAKE A FLASH LAMP.

Take an old bicycle hand pump, cut it in half and use the bottom for a powder bowl. Make a hole in one side of the bowl at about the center, and insert the screw end of the plunger; cut this in two, leaving about $\frac{1}{2}$ inch outside of bowl. Put a wire nail through the tube and then fill bowl with melted lead to about $\frac{1}{4}$ inch above the tube through which the nail is inserted. Then take out the nail and drill and countersink a hole in the lead to meet the hole in end of tube. Attach about 2 feet of small rubber tubing to the metal tube in the side of bowl. File 2 notches opposite each other in top of bowl, about $\frac{1}{4}$ inch wide by $\frac{1}{8}$ inch deep. Make a handle of wire, or of wood, and you have one of the best flash lamps obtainable, at a cost of about 15 cents. Use only pure magnesium powder in the lamp, and a lighted parlor match laid across the top in the notches is all that is required to make the flash. No bulb is needed; simply blow the powder up into the flame by placing one end of the tube in the mouth. This contrivance will give as satisfactory a flash as any expensive lamp.

TWO OR MORE EXPOSURES ON ONE PLATE.

C. H. BAILEY.

I send you 3 drawings showing how I take 2 or more pictures on one plate, which may interest amateurs who use large cam-

eras and who do not wish to use a whole plate on each subject.

For making 2 exposures on one plate

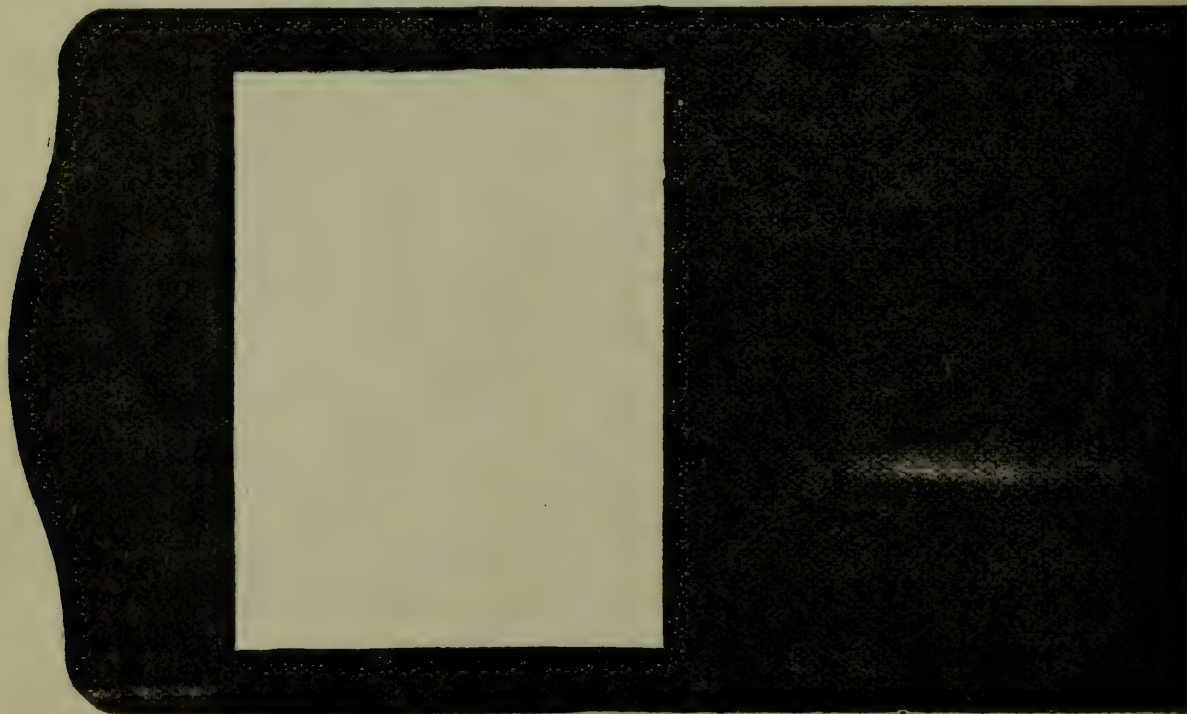


Fig. 1.

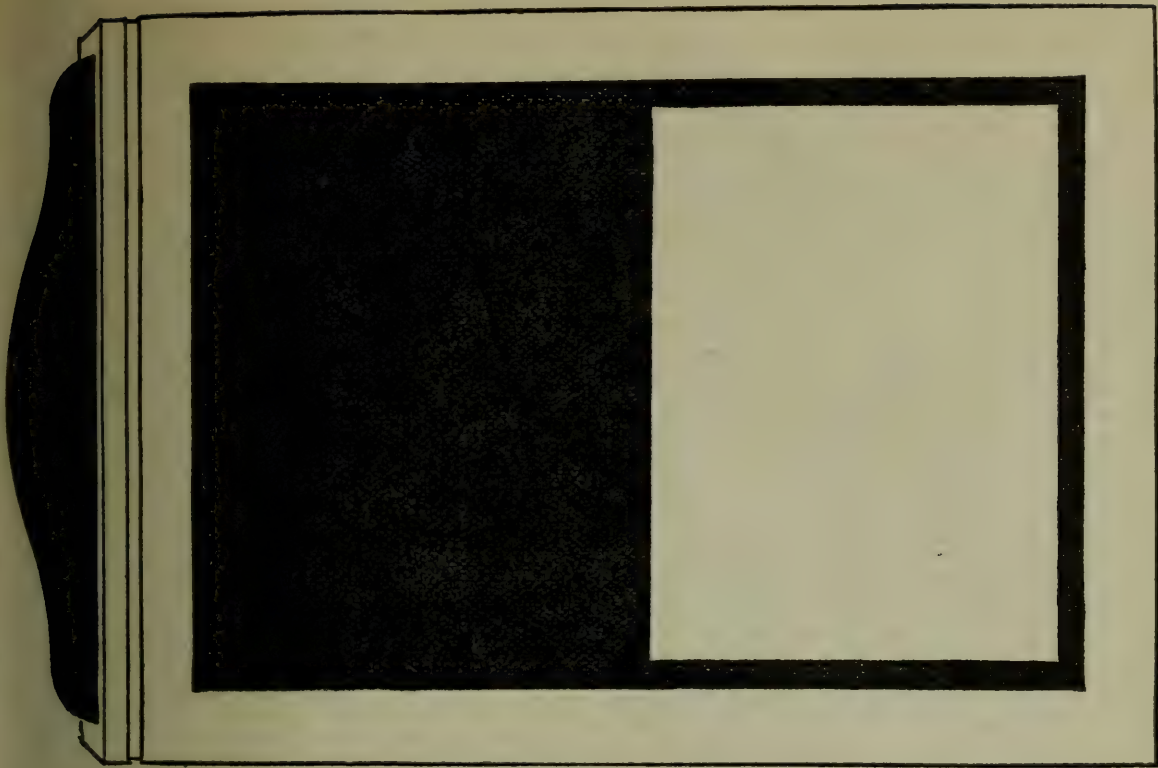


Fig. 2.

draw a pencil line down the center of screen; focus camera, placing picture on $\frac{1}{2}$ of screen; cap lens and insert plateholder; draw slide and substitute slide made as follows: Take a piece of hard rubber or stiff cardboard, same size and thickness of slide; cut space in one end a little less than half

each slide and simply reversing slide after each exposure.

PHOTOGRAPHING IN THE MOUNTAINS.

I am only a snap-shot fiend, and carry my camera with me in the mountains all summer, when on prospecting and exploring expeditions in the remote, wild portions of Idaho, where grand scenery is the rule and not the exception. I have decided that for mountain work of all kinds to be a success a camera should have a lens like a telescope, fully as powerful as the best field glasses. It would give a detail one cannot obtain otherwise. Would also save one many a weary climb or ride to get near enough for a desirable shot at some grand old peak, or into some almost bottomless canyon. It would also enable us to get good views of game, while those made with the ordinary camera are worthless.

For mountain work I would favor a 5 x 7, using roll films. They can be carried all summer on a pack horse without danger of breaking or scratching. I use a sole-leather case, with shoulder straps like those of a knapsack. This gives me free use of my arms, and I scarcely notice the weight of the camera when climbing the hills or riding. Have carried my camera over 800 miles this season, on foot and on horseback, without the least fatigue. The most difficult problem for me is to take a picture that will show the extreme depth of a canyon. The bottom always seems to come up on a level in the top walls. Why?

M. W. Miner, Banner, Idaho.



Fig. 3.



Fig. 4.

size of plate, as shown in Fig. 1; after placing in substitute slide uncap lens and expose; when exposed cap lens, withdraw slide and insert original slide.

To expose other half of plate focus on other half of screen and use slide with opening cut in opposite side, as shown in Fig. 2.

Four exposures may be made on one plate by using slides made as shown in Figs. 3 and 4, making 2 exposures with

HOW MUCH GOLD.

In your issue of September, '99, is a communication on the subject of the combined bath for photos, which lays down the hard and fast rule that 231 square inches (one dozen 4x5 prints) are the limit of the area that can be successfully toned with a grain of gold. This is a sample of the loose and illogical directions with which the amateur has everywhere to contend. Take, for instance, 2 prints of a given size, one a dark interior or portrait, with dark background, and the other an outdoor snow and water scene, with light sky. Is it not evident the latter print will be nearly all white when finished, that the whites will not have required any gold or other toning material, and that in consequence it may not have weakened the toning bath 1-10 so much as did the dark interior?

A combined bath will do curious and cranky things, and until the reasons are discovered one will at times think all baths are fakes; but when properly worked some of them seem to give permanent and brilliant prints. Not long since we had occasion to tone what amounted to about 40 4x5 gelatine prints, out-of-doors views with rather dark foregrounds. We used only one grain of gold, toned them quite dark, and they came out very well.

The next time we attempted to do somewhat less work with a like amount of gold, but divided the prints into 2 lots when toning, with the result that the first lot were all good and the second all poor. We don't work them that way any more.

The Ka-Korser-Ko, Limited.
Minneapolis, Minn.

SCIENTIFIC DEVELOPMENT.

While not claiming entire originality, I venture to give a favorite formula for developing. Take dry pyro, one small mustard spoonful (about 2 grains); water, one ounce; saturated solution of soda sulphite, one dram. Mix in tray, place plate in this solution, when pyro is dissolved. Next add of a saturated solution of soda carbonate (washing soda) say a few drops to begin work—10 drops will do for an ordinary exposure—and continue to add more, drop by drop, until the plate begins to develop. Add, if necessary, a few drops (2 drops to ounce of developer) of a saturated solution of potassium bromide. You can develop any exposure in this tentative way, dosing each plate as its individual need demands. This is a sure and simple method, and you do not have any old oxidized pyro on hand. I develop 3, 4 and 5 plates with only one mixing of above developer. A simple hydro developer can be made in a somewhat

similar way. You "doctor" each plate, and have no risks at all. Your outfit is simple. A handy way to use hypo is to have a saturated solution on hand and dilute with water when wanted for use.

A. B., Belmar, N. J.

PLATINUM BATH.

Please give me more information about the platinum bath mentioned in November, 1898, RECREATION. Is the print, after being taken from printing frame, put directly into the bath, or is it first toned in a gold solution? What is a saturated solution of citric acid? My druggist said he did not know how to make it.

H. W. Dixon, Minneapolis, Minn.

ANSWER.

To make platinum bath, take 2 ounces saturated solution of citric acid, put into it 15 grains of platinum chloride, lastly add 20 grains copper chloride. Shake the whole until dissolved. This makes a concentrated stock solution. For toning, take 1 drachm of this to 15 ounces of water. Put prints into this directly from printing frame. This will give a platinum tone. No gold or other toning is needed. Fix and wash as usual.

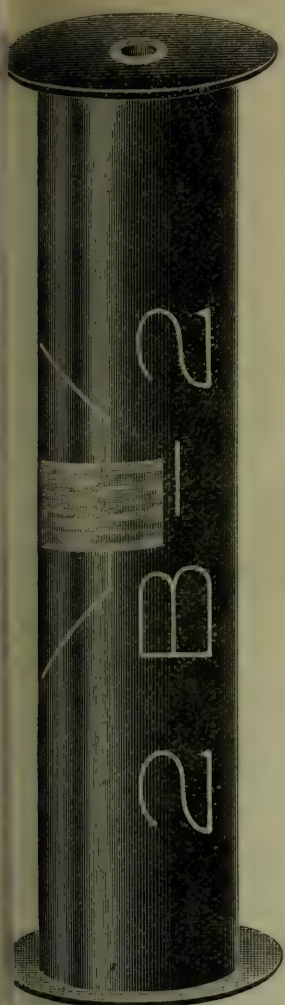
A saturated solution is the strongest possible solution—as much of a given drug as a certain quantity of water will dissolve. A druggist who does not know how to make a saturated solution of anything soluble is a wonder, and should be labored with by the Board of Pharmacy.

HOME-MADE KITS.

Take a piece of cardboard the size of the plate for which your camera was made, cut an opening in the center the size of the smaller plate you desire to use, being sure to measure from the center of the cardboard. Cut a slit from each right-hand corner of the opening toward the same corner of the board. Take a piece of heavy watch spring—you can get it from the jeweler for the asking—that will reach from one slit to the other, allowing it to curve a little on the inside of the opening. This forms a spring to hold your plate in place.

The kit is now complete. Put it in your plateholder, insert your plates in opening, pressing spring toward the end; put in your slide and you are ready for business. By this method you can use any size plate smaller than that for which your camera is intended. Before using kits, lay off on the ground glass with a lead pencil the exact size of each kit opening, so when focusing you can tell just what size to make your object.

W. B. Scott, Washington, Pa.



2 & 6 Exposure Cartridges

Now and then, especially in winter, the amateur wishes to make from two, to half a dozen pictures but does not care to use up an entire spool of a dozen exposures before development. To provide for this we have now prepared to furnish daylight loading cartridges, for two or for six exposures. For work at home then, as well as for one's outings, the Kodak becomes more convenient than the plate camera. No dark room except for development, no bothersome plate holders or dark slides.

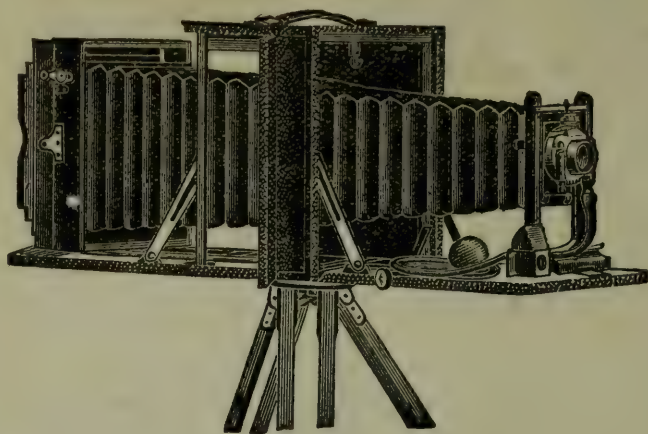
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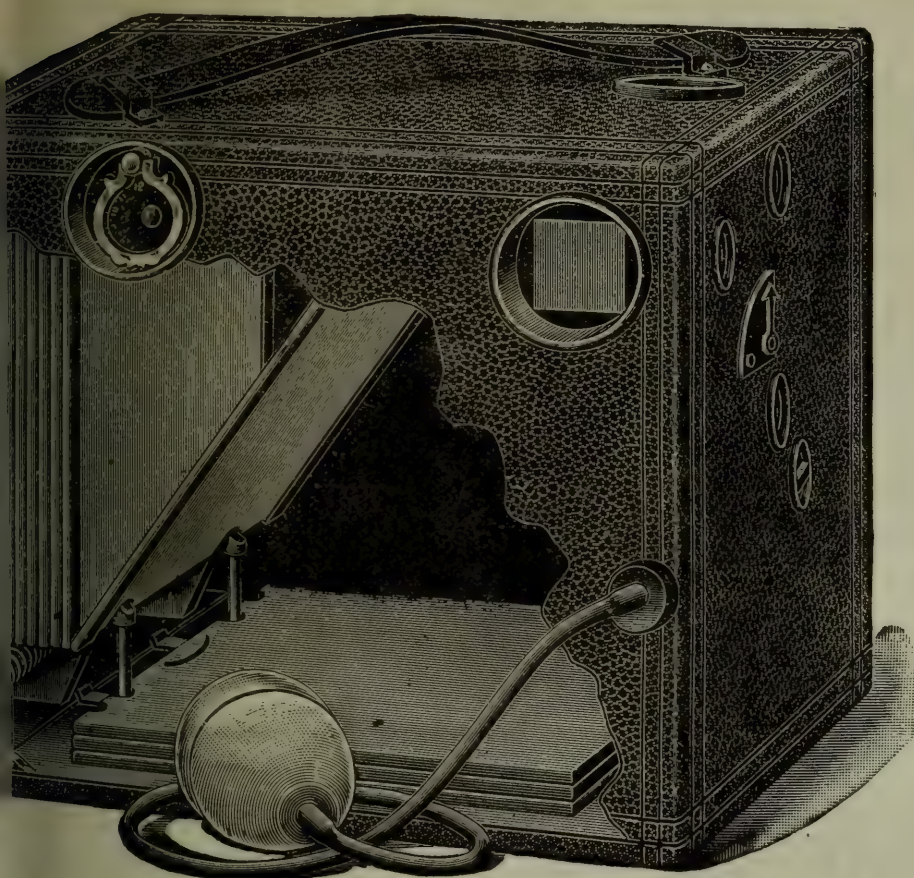
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The Korona camera, made by the Gundlach Optical Co. and which was awarded me as the third prize, is greatly admired as the most compact and best finished 5 x 7 outfit we have seen. I thank you for the opportunity afforded by the very fascinating competition. Uncle Tom, the subject of the picture, is a character. He wanted to dress up, but I took him as he came in from his wet work and suggested one of his characteristic attitudes. I hope the result will give the readers of RECREATION the same pleasure that Tom's hosts of friends have expressed.

I wish to testify my thorough appreciation of RECREATION. It is one of the most welcome visitors to my study, and the latch string will be out as long as it wishes to come. I marvel at its cheapness, workmanship and completeness. You have my best wishes for your prosperity, and, what is more practical, my recommendation whenever I see a chance to increase your circulation.

Frank E. Ramsdell, Cambridge, Mass.

The photographic department of RECREATION affords me much pleasure. I only wish more of the A B C of the art might be published, as I am often lost in the intricacies of various problems.

G. F. Kearsley, Radford, Va.

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If you have not yet ordered a set of the Hudson pictures, illustrating the poem "To My Gun," you should do so at once. Only a few sets were printed, and about half of them have already been sold. No more will be printed, as the plates were too much worn in running the November edition of RECREATION to make any more good impressions. Only \$1 for the 5 full page artist's proofs. Nothing finer could be found at the price, for decorating an office, a dining-room, a parlor or a den.

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W. R. Gray, Oakton, Va.

Mr. Boreum (11 p. m.)—My motto is "Pay as you go."

Miss Cutting—Well, I'm willing to lend you a small amount if it will help you out.—Chicago News.

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G. E. Moulthrop, Main St., Bristol, Conn.

A mother of twins one night heard a series of giggles proceeding from the neighborhood of the children's bed.

"What are you laughing at there?" she said.

"Oh, nothing," replied Edith, one of the twins, "only you have given me 2 baths and Alice none at all."—Tit Bits.

Who make the best lens for all around work?

E. T. H., Fort Wayne, Ind.

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E. W. N.

To color photographs fasten the print face downward to glass by means of gelatine, removing any surplus while hot, and rubbing down with sandpaper when dry. Then immerse in a cold mixture prepared by heating at 130-140° F., one pint of castor oil, a dessertspoonful of white vaseline, a teaspoonful of spermaceti, 20 drops of oil of rosemary, 20 drops of citronelli oil, and a small quantity of alkanet root. Heat the liquid and the photograph together to 130-140° F., and keep at this temperature about 2 hours. Then allow them to cool. Place the print for about 2 hours in cold castor oil, after which rub dry with linen, and apply the requisite colors to the back.—*The Professional Photographer.*



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Heroine (in amateur dramatic performance)—You know, Mr. Hankinson, that if we do any kissing on the stage in this play it must be "stage kissing," or, at least, seem to be—you understand?

Hero—Why, I didn't know there was to be any kissing in it at all.

Heroine (instantly freezing) — There won't be, Mr. Hankinson.—Chicago Tribune.

About \$4,000 was collected from hunting licenses in Wyoming this year. This all goes to pay the game wardens and to protect the game.

S. N. Leek, Jackson, Wyo.

"I had a glorious dream," said the turkey.

"What was it?" inquired the goose.

"I dreamt that instead of assassinating us with an ax the gun would be used in the future."

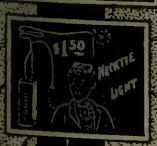
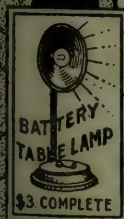
"I don't see any difference; the farmer will kill you any way."

"Yes; but I dreamt the farmer's wife would do the shooting. How safe I would be if dreams were true!"—Chicago News.

RECREATION is the best sportsmen's periodical ever published.

R. W. Lloyd, Lake Mills, Iowa.

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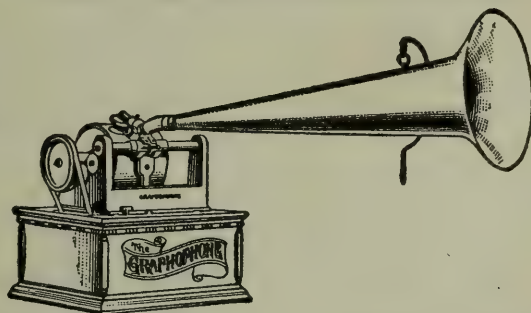
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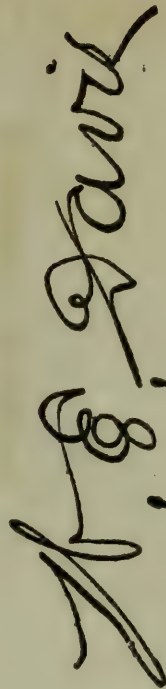
Editor RECREATION

19 West 24th St., New York, N.Y.

Dear Sir:-

You will probably be pleased to know that I have found your magazine one of the best advertising mediums in America. The short notice with reference to our 1899 Calendar, which you inserted in the February issue has brought in nearly 700 requests, and every morning we still receive letters mentioning RECREATION and asking for a Calendar. I regard the results as almost phenomenal.

Yours truly,



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we can do the Fifth Avenue style of work at modest prices. Give us a trial and we will convince you of the truth of these statements.

Our Winter Importations now on view.

FRED. C. MARTIN,
Merchant Tailor,

155 West 23d St., New York.

We are having excellent sport these days bagging some of the fat teal ducks as they are making their flight to the Gulf of Mexico. We are about 150 miles from the gulf, in the famous Brazos valley, and the great floods in June left hundreds of acres under water. It now stands from a foot to 5 feet deep, and is covered with lilies and green moss. We anticipate first-class shooting all through the winter, as these places will be such excellent feeding grounds for all kinds of ducks. So far, I have heard of no game hogs, as the men who have been out seem satisfied if they got 8 to 12 birds a day. RECREATION is on a high standard and I enjoy it very much indeed. It certainly has made a fine growth in 5 years.

J. C. Burkett, Calvert, Texas.

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Yours truly,

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Wm. Linck

For Sale:—Photographs, lantern slides, and bromide enlargements of birds, birds' nests and mammals photographed from live wild specimens in their native haunts. These photographs are unsurpassed for sharpness, detail and beauty. The series at present comprises the following: Am. Woodcock, standing; Screech Owl; Am. Woodcock, boring; Long-eared Owl; Bob White pair, feeding; Arcadian Owl; Downy Woodpecker, Rose-breasted Grosbeak, Chickadee, Red-eyed Vireo, Towhee Bunting, Oven Bird, Black and White Warbler, Red Squirrel (2 positions); Black-throated Blue Warbler, Gray Squirrel, Catbird, nest and eggs of Louisiana Water Thrush, White-throated Sparrow, nest and eggs of Wilson's Thrush, nest and eggs of Song Sparrow, nest and eggs of Wood Thrush, nest and eggs of Prairie Warbler, nest and eggs of Catbird.

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Postage prepaid on all orders of \$1.00 or more. Address all orders to A. H. Verrill, Box 1649, New Haven, Conn.

Where shall we find the flour which the world needs and must have? We get glimpses and suggestions of it in the cakes which Sara made for Abraham, and in the bread which Rebekah made for Jacob, to sustain him on his long journey to the land of Laban's pretty daughters; we get measurable revelations of it in those earlier days and Oriental lands in the bread generally called, by reason of its great wholesomeness, "the staff of life"—bread made of flour of the whole wheat.

But the glimpses and suggestions and measurable revelations were but prophecies of time when patient research and modern knowledge, and philanthropic interest in the betterment of the race, combined with great commercial enterprise, should produce the Franklin Mills Flour of the whole wheat—the only flour that will make a perfect bread, a bread that is wholesome food for the entire body.—Exchange.

Last fall I was in camp with a common oil stove. All the cooking utensils were Black with soot, and there was plenty of discomfort. I came into town, got a copy of RECREATION, saw all about the Primus vapor stove, ordered one, and am now back in camp clean, warm and happy.

T. P. Bottom, Seattle, Wash.

A Message

to ye who

Monger Words

and break down

Grey Matter

Many of your craft are highly organized and cannot stand the action of common coffee on the complex nervous system.

If your machine is working perfectly, go it and Godspeed to you. If physical ails handicap you for doing your best, quit coffee ten days, and our word for it, you will take on added ability.

You can make the shift without missing a cog if you use Postum Cereal Coffee. Yes, it will taste good if you insist on having it made according to directions. It certainly does blend with the albumen of your food, and that's the combination Nature uses from which to rebuild brain. If you have a use for brains, use POSTUM COFFEE.

All Grocers Sell It.

A Christmas present of a wolf rug brings me the following graceful reply:

Your welcome gift is warmly appreciated. Accept my thanks for him. I shall never again try to keep the wolf from the door. My whole effort shall now be to keep him in, and to that end he lies under my feet. German like, we say "him," and have named him "Blanco," in memory of Mr. Thompson's charming beast.

Lalla A. Hopkins, New York City.

For Exchange: A good transit, in first class condition, for best offer of a shot gun. Transit originally cost \$150.

E. H. Mitchell, Steel Falls, Me.

Wanted:—A pair of Virginia deer; last spring fawns preferred. Address, with full particulars, F. S., care RECREATION.

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W. D. Rinkle, Boonville, N. Y.

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The Ingersoll Dollar Watch is worn by every judicious sportsman on outings instead of the Hundred Dollar one, because even if it is injured a dollar does not break him and besides it keeps better time under rough usage than the most expensive—that is an indisputable fact; it's a beauty too.

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A REMARKABLE MAP.

The growing appreciation of the use of beauty in the statement of facts is well exemplified in a map just issued by the G. P. A. of the New York Central Railway.

Intended largely for distribution in Europe, Asia and the "Islands of the Sea," in connection with "Around the World" business, this new map consists of a beautiful and accurate delineation of the United States on a sheet 20 by 48 inches in size, the ocean spaces in the corners being utilized for smaller-scale maps of the Atlantic ocean and Europe, the Pacific ocean with the Asiatic coast, Australia, Alaska and the Klondike region.

The map is unusually clear and distinct and shows all the railroads in the United States. The artistic treatment is admirable, the soft buff tint of the land blending with and shading into the rich olive of the mountains and contrasting pleasingly with the blue of the water, while the whole is brightened by the red lines representing the New York Central system.

The number and extent of these lines will be a revelation to anyone who thinks of the "New York Central" simply as a road running between New York and Buffalo, for they reach from Boston on the East to Chicago, St. Louis and Peoria on the West; and from Montreal and Mackinaw City on the North to Cairo, Cincinnati and Pittsburg on the South.

This surprising fact is readily explained, however, by the statement beneath the map title that the system embraces in its through-car lines the New York Central & Hudson River, Boston & Albany, Lake Shore & Michigan Southern, Michigan Central, "Big Four Route," and Pittsburg & Lake Erie Railways. These lines, brought out conspicuously in red, clearly demonstrate the fact that this famous system covers the most populous section of the United States, passing through cities with an aggregate population of nearly 20,000,000, and carries its patrons through the best country to the best places, including the best health and pleasure resorts of New York, New England, the Atlantic coast and the Great lakes.

One of the most remarkable features of the map, however, is the treatment of the mountains. Contour lines are introduced showing elevations, and the slopes are heavily shaded to give "lift" to the higher ranges and peaks, with the result that these features stand out in bold relief as though modeled in clay.

A copy of No. 21 of the New York Central's "Four-Track Series," which contains, in addition to this valuable map, a large amount of information of interest to all travelers—whether "Round the World" or not—will be sent, postpaid, on receipt of 3 cents, by George H. Daniels, G. P. A., N. Y. C., Grand Central Station, New York.

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You
a
Cog
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A workman in a shop, a clerk in a store or office, a "hand" on a farm, all are like "cogs" in a wheel, revolving continually but making no progress. If you are so situated, write and learn how to prepare yourself at home, in your spare time, to occupy one of the really desirable positions in the world. We guarantee to make you a Mechanical or Architectural Draughtsman, a Commercial Correspondent, Stenographer, or Bookkeeper.

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**25c at all Druggists.
C. H. STRONG & CO., Props.,
Chicago, Ill., U.S.A.**

The passenger department of the Lake Shore and Michigan Southern Railway has issued a beautiful book entitled "Book of Trains—Christmas Number." It contains half-tone reproductions of many beautiful drawings by such artists as Margaret West, Frank Holme, A. E. Philbrick, Burt Barnes, E. N. Clark, T. S. Kinney, B. S. Menzler, Sarah Croby and Ike Morgan. There are Christmas stories and poems by Eugene Field, Mrs. E. C. Stanton, L. V. De Foe, Francis R. Havergal, J. R. Lowell, Irwin Russell, C. C. Moore, Murat Halstead, George W. Curtis and J. L. Molloy. The cover of the book is a rare work of art. It contains reproductions of 2 famous paintings, bordered with holly and printed in colors. Altogether, this work is a dainty and delightful souvenir of the holiday season, and every family should have a copy of it. It will be mailed free to anyone writing for it and mentioning RECREATION. Address E. J. McMahon, L. S. & M. S. Ry., Cleveland, Ohio.

Mr. U. Nehring, 16 East 42d st., New York.

Dear Sir—I have bought 3 sets of your improved lenses within the past week; am well satisfied with them. Yours respectfully,

W. C. Smith,
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For Sale: Live Buffalo, Elk, Mountain Sheep, Antelope, Mule Deer, Wolves, Black, Brown, Cinnamon and Grizzly Bears. Prompt and careful shipments.

Hunting and tourist parties outfitted and guided, at reasonable rates. Expert guides always employed.

References: Arthur Brown, Supt., Philadelphia Zoo; E. M. Bigelow, Chief, Dept. of Parks, Pittsburgh, Pa.; W. T. Hornaday, Director, N. Y. Zoo Garden and G. O. Shields, Editor RECREATION.

Address Howard Eaton, Medora, N. D.

The Massachusetts Fish and Game Commissioners are considering a proposed amendment to the game laws in that state, to limit the sale of game, and it is hoped they may decide to push such a bill through the legislature at its next session. The conduct of the Boston game dealers during the past few years has been a disgrace to the State. They sell game all the year round, and openly invite to that city the shipment of game that has been killed in other States and shipped out of them in violation of local laws.

I trust all members of the L. A. S. in Massachusetts, and all other friends of game protection there, will aid the commissioners in securing the needed legislation.

The Laflin & Rand Powder Co. has issued a 1900 calendar, the central figure of which is a picture of a magnificent bull elk in the act of bugling. It is a reproduction of the painting by Carl Rungius, and all who know his work will readily understand that this is a leader among calendars. It is made in 2 sizes—one to hang on the wall and the other to place in any nook or corner of your desk. Every sportsman in the world should have a copy of this calendar and you can get it by asking for it and mentioning RECREATION.

Home-Made Dog Kennels, cheap, adjustable, up-to-date, perfect ventilation; cleaned quickly, thoroughly and conveniently; cool in Summer, warm in coldest weather; send 25 cents for plans and specifications.

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Subscriptions need not all be sent at once. They may be sent in instalments as taken and credit will be given on account. When the required number is obtained the premium earned will be shipped.

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THREE subscriptions at \$1 each, a copy of *The Battle of the Big Hole*, cloth; or a No. 41 Stevens Pistol, listed at \$2.50; or 1 doz. Chatfield Bass Flies, assorted, listed at \$2; or a safety pocket ax, made by W. L. Marble and listed at \$2.50.

FOUR subscriptions at \$1 each, a copy of *Camping and Camping Outfits*, cloth; or a No. 3 Acme Camera and Outfit, listing at \$3; or a No. 101 Primus Oil Stove, listing at \$4.

FIVE subscriptions at \$1 each, a copy of *Cruisings in the Cascades*, cloth; or a Willsie Camera, made for cut films, and listed at \$5; or a Wizard V (Boss Dandy) Camera, 4x5, made by the Manhattan Optical Co., and listing at \$5; or a Forehand New Model Revolver, listing at \$4; or a Hub Hawk-Eye Camera, listed at \$5; or a Yawman & Erbe Automatic Reel, listed at \$6 to \$9.

SEVEN subscriptions at \$1 each, a copy of *The Big Game of North America*, or of *The American Book of the Dog*, cloth; or an Australian Mosquito-proof Tent, listed at \$7; or a Stevens Diamond Model Pistol, listed at \$5; or a Korona Camera, Model IC, made by the Gundlach Optical Co., and listing at \$7.

EIGHT subscriptions at \$1 each, a Waterproof Wall Tent 7¼x7¼, made by D. T. Abercrombie & Co., and listed at \$7.50; or a Split Bamboo Fly Rod, listed at \$8.75; or a No. 4 Cyclone Camera, listed at \$8; or a Hawk-Eye, Jr., Camera, made by the Blair Camera Co., and listed at \$8.

NINE subscriptions at \$1 each, a No. 17 Stevens Favorite Rifle, listed at \$6; or a Wizard A Camera, made by the Manhattan Optical Co., and listed at \$10.

TEN subscriptions at \$1 each, a Steel Fishing Rod, listing at \$6 or less; or a Kenwood Sleeping Bag, listed at \$10; or a Cut-Glass Salad Bowl, made by Higgins & Seiter, and listed at \$4.50; or a Stevens Ideal Rifle, No. 44, listed at \$10; or a Gun Cabinet made by G. S. Hudson & Son and list-

ing at \$12; or a Hudson Fishing Tackle Cabinet, listed at \$10.

TWELVE subscriptions at \$1 each, a No. 18 Stevens Favorite Rifle, listed at \$8.50; or a Korona Camera, Model IA, made by the Gundlach Optical Co., and listed at \$13; or a Peabody Carbine valued at \$12.

FIFTEEN subscriptions at \$1 each, a Kenwood Sleeping Bag, complete with canvas cover, listed at \$16; or a Bicycle Folding Cyclone Camera, No. 10, listed at \$16; or a Wizard B Camera, 4x5, made by the Manhattan Optical Co. and listed at \$14; or a Shakespeare Reel, Silver Plated, listed at \$15; or a 4x5 Tourist Hawk-Eye Camera, made by the Blair Camera Co., and listed at \$15.

TWENTY subscriptions at \$1 each, a 14-karat Gold Hunting-case Watch, with Waltham Movement, listed at \$20; or a Complete Working Model of the Battleship *Oregon*, 36 inches long, and listed at \$15; or a Repeating Rifle, listed at \$16 or less; or a Mullins' Duck Boat listed at \$20.

TWENTY-FIVE subscriptions at \$1 each, a Gun Cabinet, made by the West End Furniture Co., and listed at \$30; or an Improved Gramophone (Zonophone), listed at \$25; or a Waterproof Tent, 14½x17, made by D. T. Abercrombie & Co., and listed at \$25; or a Recreation Camp Mattress, made by the Pneumatic Mattress and Cushion Co., and listing at \$20; or a Repeating Rifle, listing at \$20 or less.

THIRTY subscriptions at \$1 each, any Stevens Rifle or Pistol, listed at \$20 or less; or a Shattuck Double Hammerless Shot gun, listing at \$25; or a Repeating Rifle, listed at \$25 or less.

THIRTY-FIVE subscriptions at \$1 each, an Arlington Sewing Machine, listed at \$19.50; or a 5x7 Korona Camera, listed at \$32; or a Forehand, grade O, double hammerless shot-gun.

FORTY subscriptions at \$1 each, any Stevens Rifle or Pistol, listed at \$30 or less; or a Savage .303 Repeating Rifle.

FORTY-FIVE subscriptions at \$1 each, an Ithaca, Quality No. 1, plain, double-barrel Hammerless Breech-loading Shot-gun, listed at \$40.

FIFTY subscriptions at \$1 each, a high-grade Clipper or Elk Bicycle, worth \$50; or a Korona Long-Focus Camera, 5x7, listed at \$50.

SIXTY subscriptions at \$1 each, a Lefever Hammerless Shot-gun, Grade H, listed at \$44.

ONE HUNDRED subscriptions at \$1 each, a high-grade Wilkesbarre Gun, with Damascus barrels, listed at \$125.

ONE HUNDRED AND FIFTY subscriptions at \$1 each, a fine Lefever Hammerless Gun, Grade E, with automatic ejector, listed at \$120.

Address,

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23 West 24th Street
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Will last a life-time. Non-sinkable and Indestructible.

14 feet long,
36 inch beam.

Made in
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Made in Sheet Metal Always ready for use
Will last a lifetime
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Catalogue on application

In speaking of a new book lately issued by the King Powder Co., of Cincinnati, in December RECREATION, I mentioned Mr. Lindsley as the secretary of that company. Nearly every shooter in the country knows that he is the superintendent of the smokeless powder department of the King Co and that Mr. J. H. McKibbin is the secretary. Both are valuable men, and the King Powder Co. could not keep house without them.

Let us hear some more of H. E. Loftie's singing mouse.

F. E. Trubody, Napa, Cal.



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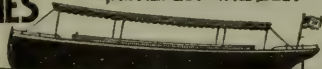
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HAS THE MOST ATTRACTIVE PREMIUM LIST EVER OFFERED BY ANY MAGAZINE.

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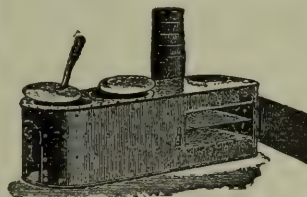
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Mention RECREATION.

George M. Houghton, G. P. A., of the Bangor and Aroostook Railway, reports the shipment over his road during last October, November and December of 3,756 deer and 166 moose. The heaviest shipments of deer were as follows:

From Patten, 406; Norcross, 406; Greenville, 1,230.

Of moose the heaviest shipments were: From Patten, 36; Norcross, 21; Masardis, 26; Greenville, 42.

This would seem to indicate that the best hunting grounds are near the points named.

The shipments over the B. & A. recorded during the last 6 years are as follows:

	Deer.	Moose.
1894	1,001	45
1895	1,581	112
1896	2,245	133
1897	2,940	139
1898	3,377	202
1899	3,756	166

The moose shown as shipped in December are those killed in open season, and shipped by special permit or left with a taxidermist to be mounted.

The above statement, compiled from records kept by station agents, comprises only game shipped by visiting sportsmen, and does not include that killed by native hunters, nor the large quantity consumed in camps.

It seems strange that the game could ever have withstood this terrible draft, yet the Maine Game and Fish Commissioners, the Maine guides and many sportsmen of the State insist that deer, at least, are steadily increasing.

Maine has rigid game laws and they are fairly well enforced. These figures, therefore, form a powerful argument in favor of liberal appropriations by other States for the protection of their game. It is estimated that 2,000 people from other States go to Maine each year to hunt and fish.

ANOTHER CRANK LOOSE.

There is a serious fight on in Ohio, between certain farmers, led by a queer freak named John Davey, and the sportsmen of the state. Davey is sending out hundreds of postal cards bearing this remarkable announcement:

THE QUAIL.

"It is a bird that does no harm, but is of inestimable value as a foul seed and bug destroyer. Not one should be killed. Ohio removes the protection of law for a few weeks. During this period our innocent little chicken-like bird, the quail, the farmer's friend, is mercilessly destroyed. Their persecutors and slayers are mainly saloonists, dudes, rakes, etc., who run over crops, tear down fences, and fire the same by throwing down lighted matches and stubs of cigars.

"My article that was published in the Ohio Farmer last November, calling for the protection of the quail at all times and in all ways, has been freely copied by the press of Ohio. This has aroused the 'sports.' It is now claimed that they are starting a counter petition to be worked through the saloons.

"The petition that I have prepared to protect poor 'Bob White' calls for signatures from both sexes over age. Shall the carelessness and lethargy of our farmers and their wives allow the vicious element of society to outnumber them in a petition to our State Legislature? I hope not! Arouse, brother farmers! Let the voice of decency and right triumph! There is no reason why a half million names cannot be secured within 3 weeks. I want the petitions all sent in by the 1st of February. I have prepared the petition heads and reading matter to go with them. Send a nickel for a supply. To the work, boys! To the work! Put your neighbors to work! and be sure to return the petitions by February 1. I will see that they go before the Legislature."

Of course Davey will have no trouble in securing thousands of names, but it is hardly likely that any intelligent body of lawmakers would allow themselves to be misled by such a visionary crank. I understand the sportsmen of the State are circulating petitions diligently, and it is needless to say they will go to Columbus bearing the signatures of thousands of the substantial business men and taxpayers of the State. I trust these sensible people may win in the fight.—EDITOR.

I received the Chatfield flies as premium and am well pleased with them.

D. Von Blagicom, Victor, Mont.

I have read with great interest the article in October RECREATION, on the Minnesota National Park, by Charles Cristadoro. It is a surprise to me that Mr. Cristadoro, who stands for a great and good scheme like this, should indulge in such misleading statements as appear in this article. Some of these are unimportant, but nevertheless misleading. Mr. Cristadoro refers to the timber thief who burns his slashings "to cover his felonies." It is a mystery to me how this would cover them, for the stumps do not burn in such a case.

Next we read of the pine land man who raised his price of stumpage \$2 a thousand because of the starting of the park agitation. Mr. Cristadoro knows as well as I, who have no connection with pine lands or lumber, that pine stumpage took a great jump about that time; so the man who did not raise his price was foolish.

Mr. Cristadoro assigns to Duluth a reason for her opposition to the park project which is startling to one who knows the facts. He says, "Let us take Duluth at her word," and then puts into her mouth words of which she never dreamed. According to him she "cries out that in reserving the great forests tributary to Duluth, the main source of her future prosperity is destroyed." Supposing Duluth were nothing but a lumber town like Stumpville, Mich. What would that have to do with the case, as the forests proposed to be reserved are not tributary to Duluth, but to Minneapolis? I do not know of a citizen of Duluth who ever dreamed of such an objection as he assigns to us.

Was it ignorance or something else that prompted Mr. Cristadoro to make these statements? One can hardly believe it ignorance on the part of a man who claims to be so fully posted on this park project, and who is the head and front of the movement. If Mr. Cristadoro knows the truth about these matters, why does he try to mislead us? Of course these are side issues, but still if the promoters of this plan are misleading us on small things can we rely on their good faith in more important matters?

Ross L. Mahon, Duluth, Minn.

The passenger department of the Canadian Pacific Railway has issued a lot of pamphlets that are full of interest to sportsmen, tourists and naturalists. Among these are: "New Highway to the Orient," "Summer Tours," "Fishing and Shooting," "Westward to the Far East" and "East to the West" (guides to the principal cities of Japan and China), "Banff," "Quebec," "Summer and Winter," "Montreal," "Across Canada to Australia," "Annotated Time Table" and "Around the World" folder map.

Any or all of them may be had free by asking D. MacNicoll, G. T. M., Montreal, Canada, and mentioning RECREATION.

John D. Sargent, of New York, who was suspected of the murder of Robert Ray Hamilton, a wealthy young New Yorker, and who now stands charged with the murder of his wife in Jackson, Wyo., in March, 1897, has been released from custody, owing to his mental condition.

He came to New York after his wife died, but returned to Wyoming last summer to face the charges against him. At a preliminary hearing in October Sargent was bound over to the district court on a charge of murder. He brooded over his troubles so much that he was fast becoming a physical wreck, and his release from jail was ordered to prevent a complete breakdown.

Sargent is now in Evanston awaiting trial, which will be held next spring. He is believed to be incurably insane.

The Tacoma Daily Ledger is another paper that is taking an active interest in game protection. In its issue of October 23d it printed a two-column article on this subject, setting forth in strong terms the necessity of vigorous action on the part of the Washington sportsmen to protect the game of that State. The editor of the Ledger is entitled to great credit for the valuable work he is doing in this good cause.

RECREATION is the only periodical for real sportsmen and I wait for it as if it were a check for \$100.
W. L. Henderson, Bervie, Ontario.

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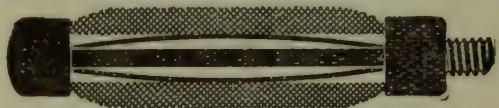
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BECAUSE those streaks of lead and rust must be removed if you don't want trouble and expense of sending barrels to the factory for costly repairs. (A close examination will often reveal lead streaks or rust).



You should get a

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BECAUSE the TOMLINSON has a simple, common sense principle, using brass wire gauze (wrapped over wood), sides which are hard enough to cut all foreign substance from the barrels, yet too soft (brass) to injure them in any way.

BECAUSE the TOMLINSON will last *forever*, as sides can be replaced when worn (they will clean a gun a great many times) for 10c. a pair. Tomlinson encloses an extra pair of sides, also tool for rag with each cleaner. Fits all rods. Gauges 8 to 20. Price \$1.00. Any dealer or prepaid by mail. Send postal for booklet telling more about the Tomlinson; also what such experts as Fred Gilbert, Chas. Budd, Ed Rulford and others have to say about the best, cheapest and most popular cleaner in the market.

USED EVERYWHERE IN THE CIVILIZED WORLD

I. J. TOMLINSON, 106 Cortland Ave., Syracuse, N. Y.

Nothing I have read in RECREATION since I became a subscriber to that excellent magazine has given me more pleasure than an article in the Editor's Corner of the September number, recounting some of the incidents of the birth and growth of this paragon of sportsmen's publications. After giving some of the details of the progress of his magazine, the editor says, among other things, "By this time I am about 7-8 bulldog." Good. I believe all true sportsmen will be glad when the metamorphosis is complete, for Coquina has taken up a work that requires plenty of sand and combativeness, and if it is a good thing to be 7-8 bulldog, 8-8 will be even better. Some of the greatest improvements history records have been brought about by bulldog pluck and pertinacity. All the great innovations that have ever been undertaken for human progress have been sneered at and declared impossible of consummation by those who stood idly by and declined to offer a helping hand. Yet these cavilers are invariably the first to seek benefit from and take advantage of the changed and better conditions when the new order has been established.

Bulldogs, as I know them, are pretty respectable animals. They generally have the courage of their convictions, and when they tackle an opponent they are usually in the right, or, at least, think so, which amounts practically to the same thing. It is the surly, ill-bred, cross-grained cur we dislike; the cur that slips up behind us and gives us a vicious nip without cause or provocation, and when we turn around to confront him, is either over the fence or else looks so sneaking and cowardly we are ashamed to kick him. Hurrah for the bulldog! either the 2 or the 4 legged kind. It pleases me so that I have to go out of doors, where there is plenty of room, and laugh long and loud whenever I think of Coquina toiling at his desk, with his thumb to his nose and wriggling his fingers (metaphorically, as he says) at his enemies, while they howl in impotent rage.

RECREATION belongs to sportsmen, and

sportsmen are the ones, practically speaking, who must keep up its subscription list. After we had read it a year or two, and have been loud in its praise, suppose we back this commendation up by continuing to take it. Let us not allow our subscription to lapse, but always keep the latest number lying around where we can read and study it whenever we have a spare moment. It is improving all the time, and not only furnishes pleasant stories so dear to the hearts of sportsmen, but its various departments, particularly those on Natural History, Guns and Ammunition, and Amateur Photography, are of great value to all who desire information on these subjects.

A. L. Vermilya, Columbiaville, Mich.

I have just cut from December RECREATION a recipe for tanning hides, author's name not given. As a graduate of medicine and proprietor of a drug store for some years it seems to me there are same material points lacking in the directions, though I don't doubt the recipe will do all it is claimed to do.

Firstly, arsenic should not be handled by anyone with a cut, sore or any break of the skin on the hands, as such a minute quantity is required to cause the death of a human being that serious consequences might result.

Secondly, arsenic and sulphur are not much more soluble than shot, and one would expect a medium solution, at least, from this. I have never tried to make the solution, but what I remember of my chemistry does not lead me to think 1-10 of the arsenic or sulphur would be dissolved by the solution of chloride of sodium and sulphate of aluminæ in water. I should suppose, therefore, the undissolved portion should be rubbed into the skin, as is done by taxidermists with the articles in the dry state in preserving bird skins.

The December number of RECREATION excels all your former excellence.
J. A. Sampsell, M. D., New Orleans, La,

HAVE QUIT IMPORTING.

No. 245 East 56th St.,
New York, December 20th, '99.
Secretary American Kennel Club,
55 Liberty St., New York City.

Dear Sir:—The blame for delay in a number of cases of importation of live stock into America having been unfairly attached to us, we decided, after careful consideration, to abandon this kind of business, believing that it would in the end be more satisfactory if we recommended customers to intrust their property to one of the regular express or forwarding companies. We had found that intending exhibitors frequently allowed a very narrow limit of time between date of arrival of vessel carrying animals intended for exhibition and the show date, and that one failure to realize their anticipations, due to no fault of ours, prejudiced our business as manufacturers more than 100 successes. We have, of course, in the past brought into America a very large number of famous prize-winning dogs and birds, and have received many excellent testimonials therefor.

Since May last, any report to the contrary notwithstanding, we have conducted no importations of this kind whatever.

Respectfully,
Spratts Patent (America), Limited.

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A trial package of a new and wonderful remedy mailed free to convince people it actually grows hair, stops hair falling out removes dandruff and quickly restores luxuriant growth to shining scalps, eyebrows and eyelashes. Send your name and address to the Altenheim Medical Dispensary, 912 Butterfield Building, Cincinnati, Ohio, for a free trial package enclosing a 2-cent stamp to cover postage. Write today.

William Read & Sons, the well known gun firm, of Boston, sent out last fall an unusual number of fine guns to different parts of the country. In one week they shipped 5 Scotts at \$400 each, highest quality Premier guns, in one order to a Western club. No finer lot of guns was ever delivered. They all had highest quality steel barrels, selected curled stocks and were superbly engraved and finished.

No house in this country carries a finer or larger assortment of high grade guns than Read, and it is a treat to look over their stock of Scotts, Greeners, Langs and other makes. This old house, founded in 1826, is well known all over the country for reliable goods. Read's also have on hand a big lot of high grade, second-hand guns, taken in trade, and some good bargains can always be found. They publish a list of second-hands each month.

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We make no charge for our complete Agent's Sample Book and Outfit, but in order to protect ourselves against many who might impose on us by sending for the outfit (which costs us between \$5.00 and \$6.00), with no intention of working, but merely out of idle curiosity, we require each applicant to fill out the blank lines below, giving references, and further agree to pay a temporary deposit of One Dollar and express charges for the outfit when received, if found exactly as represented and really a big money saver. While this nominal deposit of \$1.00 for the outfit is not one-fifth of its cost it insures the good faith of applicants, and we promptly refund your \$1.00 as soon as your sales amount to \$25.00, which amount you can take the first day out.

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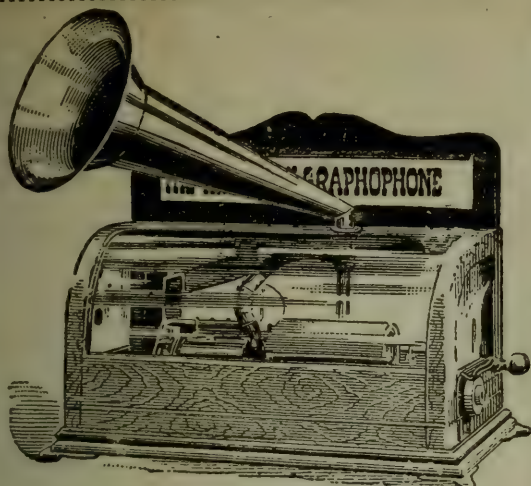
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Henry C. Kinley, Marion, Ind.

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Whether we endorse prize-fighting or not, it is nevertheless interesting to know the manner by which men arrive at such physical perfection.

James Jeffries, the present champion heavyweight of the world, and his gallant opponent, Tom Sharkey, in the greatest pugilistic encounter that has ever taken place, both pursued much the same course of training and the first and most important part of this training was to get the stomach in condition, and keep the digestion absolutely perfect, so that every muscle and nerve would be at its highest capabilities.

This was not done by a secret patent medicine, but both of these great pugilists used a well-known natural digestive tablet sold by druggists under name of Stuart's Dyspepsia Tablets and composed of the digestive ferments which every stomach requires for healthy digestion.

Champion Jeffries says: "Stuart's Dyspepsia Tablets prevent acidity, strengthen the stomach and insure perfect digestion. They keep a man in fine physical condition." Signed, James J. Jeffries, champion of the world.

The gallant fighter, Sharkey, says: "Stuart's Dyspepsia Tablets remove all discomfort after eating. They rest the stomach and restore it to a healthful condition. I heartily recommend them."

The advantage of the daily use of Stuart's Dyspepsia Tablets is that they keep the people well and ward off sickness, and are equally valuable to well persons as to the dyspeptics. Another advantage is that these tablets contain no cathartics, or poisons of any character, but simply digestive ferments which are found in every healthy stomach, and when digestion is imperfect it is because the stomach lacks some of these elements, and Stuart's Dyspepsia Tablets supply it.

They are no cheap cathartic, but a perfectly safe and efficient digestive, and the demand for them is greater than the sale of all other so-called dyspepsia cures combined. No remedy could possibly reach such a place in public esteem except as the result of positive merit. Full size packages are sold by all druggists at 50c. and the best habit you can possibly form is to take a Stuart's Tablet after each meal. They make weak stomachs strong and keep strong stomachs vigorous.

Members of the L. A. S. can buy tickets to the Sportsmen's Show

at **25c.** each

$\frac{1}{2}$ the regular price of admission

How many will you have?

Let me know at once, so an order may be placed with the manager in time to have them printed.

G. O. SHIELDS, Pres't,
23 West 24th Street, N. Y.

If you have not yet ordered a set of the Hudson pictures, illustrating the poem "To My Gun," you should do so at once. Only a few sets were printed, and about half of them have already been sold. No more will be printed, as the plates were too much worn in running the November edition of RECREATION to make any more good impressions. Only \$1 for the 5 full page artist's proofs. Nothing finer could be found at the price, for decorating an office, a dining-room, a parlor or a den.



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of a
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Buffalo Skulls
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Also polished or unpolished horns in pairs or single. Polished horns, tipped with incandescent electric lights. These are a decided novelty and are in great demand for sportsmen's dens, offices, club rooms, halls, etc.

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For particulars address this office

A factory owned by Wm. Wilson, at Wautagh, L. I., where bird skins were manufactured for women's headgear, was recently burned. It is said there were in stock at the time of the fire 10,000 skins of sea gulls, 20,000 wings of other birds, and 10,000 heads of birds. All this was destroyed and the loss is estimated at \$5,000. It is also said that Wilson employs a large number of men to hunt and skin birds for him, all the year round, and that one man has killed 141,000 birds in a single season. That such a business should be allowed to exist in New York is a disgrace to the State, and a strenuous effort will be made to pass a law at Albany this winter to prohibit the wearing of bird plumage, and the traffic in same, in this State.

I am glad this lot of stuff has been destroyed and wish every such shop in the country might meet a similar fate.

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This offer is made possible only by the fact that I have secured several of these cabinets on very favorable terms.

They are well made, handsomely finished, with compartments, racks, drawers and shelves for guns, loaded shells, empty shells, reloading tools, bullets, shot, wads and primers. Or for fishing rods, landing nets, reels, hooks, fly books, rubber boots, and everything else that goes to make up a complete hunting or fishing outfit.

These are excellent specimens of workmanship and handsome pieces of furniture. They are an ornament to any library, dining room, office or den, and every sportsman who has a home should have one of these cabinets.

Sample copies of RECREATION for use in canvassing will be supplied.

For cut and descriptive circular, address, RECREATION, 23 West 24th St., New York City.

I like the way you go for the hogs, and I noted with pleasure the scoring of Sam Geary, Dave Pentz and others of Southern Oregon. I know them and know their manner of hunting. The sooner they get into the clutches of the law the better it will be for the deer. There is another outfit at West Fork, Oregon, the Olesons, who make their living hide hunting. Another man at West Fork also hunts hides for a living. I have forgotten his name, but will send it to you if I get it. I spent 3 years prospecting in the part of Oregon that these razor-backs roam over. The sooner they are sent up the longer game will last in their country.

Though we have no fish hogs in this camp, there are plenty in the State. Here is something I saw in the Weekly Oregonian of July 21:

"Forest Grove, Oregon, July 17.—Saturday afternoon and Sunday morning Councilman C. A. Roe, Constable Harry Wescott, Mayne Abbott and John Brisbane caught 626 trout in the Nehalem river. This is believed to break the record for Washington county." I should hope it did!

Abe. Kromling, Melville, Ore.

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It is Now Within the Reach of Every Woman to Save the Drunkard.—A Trial Package Free.

By a new discovery which can be given in tea, coffee or food. It does its work so silently and surely that while the devoted wife, sister or daughter looks on, the drunkard is reclaimed even against his will and without his knowledge or co-operation. Send your name and address to Dr. J. W. Haines, 1291 Glenn Bldg., Cincinnati, Ohio, and he will mail enough of the remedy free to show how it is used in tea, coffee or food and that it will cure the dreaded habit quietly and permanently, also full directions how to use it, books and testimonials from hundreds who have been cured, and everything needed to aid you in saving those near and dear to you from a life of degradation and ultimate poverty and disgrace.

Have mailed you local paper giving an account of the killing of game by Indians. This is by no means the first offense of this nature, but it is the second attempt at arrest in the history of the county. For years Indians have been in the habit of coming from the Pine Ridge reservations into our State in bands of 10 to 50 and slaughtering game in and out of season. Wyoming has as well-framed game laws as any State in the Union, but they are not enforced. At least in this county there has been no attempt to enforce the law, except in one or 2 instances, where warrants were sworn out by private citizens. Many of our people are not in favor of game laws. Even now some of our county officials are urging the recall of the deputy sheriff from his chase of the Indians, on the plea that it will impose a large and unnecessary expense on the county. Their narrow minds cannot conceive how great a revenue would be derived under the existing laws were they enforced and our game protected.

W. T. Hobbs, Jr., Lusk, Wyo.

I thought I would write and tell you how much game I have killed this season. The first day I was out I killed 34 quails and 10 rabbits. I sent part of these to one of my friends, and he said they were not shot up badly. That was because I got 14 of them at one potshot. I got another pot, which brought me 18 birds. I shot all my rabbits sitting, because I could not hit them running. The fourth day I killed 27, which I call a very small bag. I hope you will print this in your magazine and show the public what a record in shooting I can make. I call myself an all-round sport. Success to your subscribers in getting good big bags of game.

Burt Smith, Upper Sandusky, Ohio.

ANSWER.

And you call yourself an "all-round sport!" You should say an "all-round hog." That is what every decent man, who reads your letter, will call you forever after, and you may as well adopt the title now as later. I trust it may not be many years before there will be a law on the statute books of your State to send such swine as you to prison for good long terms.

—EDITOR.

WHAT THE LEAGUE OF AMERICAN SPORTSMEN HAS REALLY DONE.

It has secured the repeal of Section 249 of the New York game laws, which permitted the sale of game in this State at all times, if killed in some other State.

It has detected 6 of the leading hotels and several game dealers of this city in the act of selling game in closed season, and has secured from them written pledges to stop violating the game laws.

It has detected one large hotel in Syracuse and another in Buffalo in the act of serving game contrary to law, and has secured similar pledges from them.

It has absolutely stopped the sale of game in New York city at all times, except in the open season for killing same.

It has arrested, prosecuted and secured the conviction of 52 men for killing game or song birds illegally, in various States of the Union.

It has secured hundreds of written promises from others, accused of law-breaking, to cease and to obey the laws in future.

It has built up a membership of 2,327, distributed throughout all the States and Territories of the Union, and extending into Canada.

It has organized 19 State divisions, which are now in active operation.

It has appointed local wardens in various counties of nearly all these States, who are patrolling their territory and looking for game law violators.

It has appointed 50 local wardens in this State, and they have arrested, prosecuted and convicted 8 men for violating game or fish laws. Two men, arrested by one of these wardens, are now in jail for dogging deer in the Adirondacks.

It has sent 4 different circular letters to all hotels, restaurants, game dealers and cold storage houses in the State, advising them as to close seasons on game, and warning them to observe same.

Its officers and detectives are constantly watching the hotels, restaurants, game dealers and cold storage houses in this city and elsewhere, in search of illegal traffic in game.

In June, 1899, it induced the United States Government to issue an order which stopped the California Fish Commission from killing 40,000 to 60,000 seals on the California coast, which had been ordered destroyed.

It is now urging the passage of Senator Hoar's bill in Congress to prohibit the importation of and all interstate commerce in bird skins for millinery purposes, and will no doubt secure its passage.

It is in the act of introducing to the Legislatures of 20 States bills to prohibit the sale of game at all times, and to prohibit the wearing, having possession or selling of the plumage of song or in-

sectivorous birds for decorative purposes.

It has among its members Governor Roosevelt of New York, Governor Johnston of Alabama, Hon. Warner Miller, Dr. Seward Webb, Bird S. Coler, William Brookfield, George H. Daniels, Daniel C. Gilman, president of the Johns Hopkins university; Dr. David Starr Jordan, president of Stanford university, and many other men of national reputation.

A meeting of local sportsmen will be held at the Halladay house this evening to settle the details and determine the date for a big hunt to be held within a few weeks. The plan, as it now stands, is as follows: All the hunters who go will be divided into 2 parties. They will start out alone, however, on the morning of the hunt, and returning at night, will count up the game. The side which has the most will be banqueted at the others' expense. In addition to the banquet the hunter who gets the most game will receive a prize, and a booby prize will go to the one getting the least. The following are the members of the 2 sides as they now stand, but they will be somewhat changed before the hunt: Mose Hadley's side—Ernie Hubbard, John Weickgenant, Garfield, Henry F. Beckman, J. M. Bryson, Ed. Halladay, Frank Halladay Chas. Dorman, Jas. T. Geddes, Lew Adams, W. H. Brown, A. N. Buckner, Robt. Binder, John Bailey, Geo. Williams, E. R. Cole, E. Collins, Geo. Boos, Joe L. Cox, Dallas Carpenter. L. D. Cooley has on his side I. J. Buckley, B. N. Beedon, Fred Lyman, M. E. Brown, Frank Bock, Vic Bramble, Dayton Beach, Sam Howes, Fordy Metcalf, F. P. Pittman, Dr. F. F. Pitcher, D. D. Ford, Mel Tuckerman, Lew Adams, Sherm Moody, Johnson, W. J. Fell, Dave McCamly and Miles Curtis.

It is safe to say there is not a respectable or decent sportsman in this whole outfit. These men, by engaging in this ancient form of slaughter, have branded themselves as pot hunters of the lowest type—EDITOR.

Our State game warden, Albert Nelson, has left little to be desired in the way of game protection here and little for the L. A. S. to do. A month ago he posted notices stating that after December 1st all persons caught violating the law would be prosecuted. During the last few days of the open season it was made pretty lively for the elk by persons trying to secure their 2 carcasses for winter's meat, but promptly after the season closed, November 31st, all hunting ceased. During the hunting the elk were driven back, but since it stopped, although it has been only a few days, they have begun to come in by the hundred. I sincerely hope the game wardens will do their duty and see that the elk are not molested this winter. Two game wardens have gone from here to the Red desert, for the winter, to see that the antelope and elk that go in there to winter are not hunted all winter as heretofore.

S. N. Leek, Jackson, Wyo.

RECREATION ONE YEAR AND A MEMBERSHIP IN THE L. A. S. ONE YEAR FOR \$1.50. IF YOU ARE A FRIEND OF GAME PROTECTION MAKE THIS OFFER KNOWN TO ALL SPORTSMEN OF YOUR ACQUAINTANCE.



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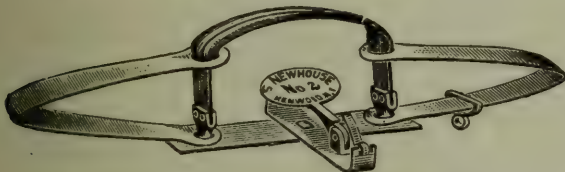
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For Sale:—Large handsome moose head with horns beautifully matched. Spread, 48 inches; top of head to tip of nose, 30 inches; top of shield to tip of nose, 37 inches. Killed by an Indian in the Mattawa region of Canada. Beautifully mounted; price reasonable. Address T. H. Ryan, 192 Broadway, New York City.

For Sale or Exchange:—One '97 Marlin rifle, 24-inch round barrel, fitted with Lyman No. 1 rear and wind gauge front sights. B. G. I. Co. rod, No. 191, with brass brush; cost \$18.50, nearly new, in good condition. Want hunting or target rifle, 10-bore shot gun or fine revolver.

A. B. Cole, West Stockholm, N. Y.

For Sale:—Rare species of owls, in the meat or artistically mounted; also moose and deer heads, and a new wolf robe. Have complete collection of the mammals of this State. No printed list. Write what you want. Ernest L. Brown, the Minnesota Taxidermist, Warren, Minn.

A Valuable Premium: To all persons sending \$1 each for a year's subscription to RECREATION, I will give a complete copy of volume 4 of the 'Oregon Naturalist.' Address, John W. Martin, Palestine, Oregon.

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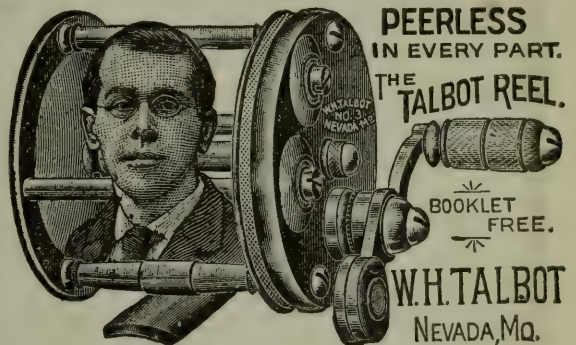
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WHO LONGS FOR SOMETHING TO READ
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SEND HIM RECREATION.
IT WILL PLEASE HIM A WHOLE YEAR
AND HE WILL RISE UP AND CALL YOU
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IN ANSWERING ADS. IF YOU
WILL KINDLY MENTION REC-
REATION YOU WILL GREATLY
OBLIDGE THE EDITOR.



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A railway ticket purchased to-day should carry with it a promise of something more than the right to a trip over the line represented therein.

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Comfort, through a careful regard as to the character of its trains, roadway, track adjustment, car cleanliness, heat, light and sanitation.

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"Book of Trains" tells about it; sent free anywhere.

A. J. SMITH,

G. P. & T. A., Cleveland, O.

THE SPORTSMEN'S SHOW.

The next sportsmen's show, which opens at Madison Square Garden March 1st and runs to March 17th, is rapidly assuming shape. Captain Dressel writes me:

We have practically all the exhibitors we had last year.—When the contracts now pending are all signed all the space in the gallery will be covered. We have all the powder companies, Schoverling, Daly & Gales, Pantasote, Abercrombie, Remington, Peters, U. M. C., and the shot companies. On the floor, in the spaces reserved for boat exhibits, we have practically no room left, and are satisfied that every square foot will be occupied when the show opens. We have in this line the Standard Motor Co., Pennsylvania Iron Works, Truscott Boat Co., N. Y. Kerosene Oil Engine Co., Sintz Mfg. Co., and others.

The stage, same as last year, will be backed up by a curtain representing the Yosemite valley, which will be carried out to the front, to show off the picture to the very best advantage. At the other end of the artificial lake will be an elevation, on which will be a canoeists' camp, where you will find canoes and canoeist camp equipments, all of which have seen service, and which are loaned so as to make the best possible representation.

The game park will be directly at the front of the Garden, same as last year, only it will be shaped differently, to accommodate itself to the space at that end. The N. Y. State Fish and Game Commissioners have decided to make a fish exhibit, and Commissioner Edward Thompson will give this his personal attention. Birds and water fowl will be in charge of V. de Guise, same as in former years. We shall have trap shooting events on the roof, and revolver and rifle ranges under the management of Zettler Bros.

We have been very strict in making conditions with exhibitors, both from hunting sections and in the trade, and we believe the quality of the show will be thereby greatly improved.

Water sports are this year under the management of Mr. William B. Curtis, of the New York Athletic Club, than whom there is none better in his line.

We shall have with us this year a number of new interests representing sections that have not heretofore made a show or been represented in any way, among which are New York State, the New York Central R. R. Co., and the D. L. & W. The Canadian Pacific and Plant systems will do their share toward making the show interesting and mutually beneficial.

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REATION YOU WILL GREATLY
OBLIGE
THE EDITOR

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 everywhere are Beautiful Streams well stocked
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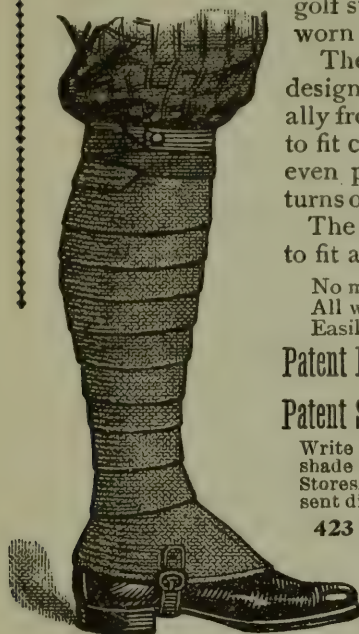
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A FEW OF THEM IN MARYLAND.

At the National Conference of the King's Daughters, recently held in Baltimore, Mrs. E. T. Hill, of Boston, chairman of the committee on resolutions, submitted a resolution condemning the slaughter of birds for millinery purposes. It was laid over.

Mrs. J. T. Mason, secretary for Maryland, opposed Audubon clubs and any agitation in favor of the birds. As for song birds, Mrs. Mason said they were hidden away in the forests, where few people hear them, and their music should not be considered in the matter.

Strange to say, after the discussion Mrs. Mason was elected a member of the National Advisory Board. An exchange suggests that each King's Daughter should hereafter wear a stuffed robin, or a group of bluebirds or bobolinks as a badge of membership, and that song birds should move their nests to the fashionable boulevards, where their singing can be heard and where the King's Daughters can the more readily capture them as ornaments for their headgear.

I move as an amendment that Mrs. Mason, and all the Daughters who favored her motion, be requested to wear a cloven hoof as a badge of membership, in order that the world may know to what peculiar class of bird destroyers they belong.

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A. E. COLBURN,
1233 G St.,
Washington, D. C.

I am fond of fishing and hunting and deeply deplore the slaughter of game, which will soon lead to its extermination in the Rocky mountains. The lumbering interests of this section are a source of great grief to the true sportsman and lover of nature. One now has to take long trips off the railways and larger water courses to find large, old fashioned timber, and in many cases the lumberman's ax has denuded the hills in places that seem almost inaccessible. Outside of the destruction of timber, which is an evil that will bring its own punishment to every settler and agriculturist in the West in the course of a few years, the slaughter of game is the next worst evil, and this is brought about largely by the sale of it. The only way to save the game is to prohibit absolutely the sale of either flesh or pelts. I travel a great deal throughout the inter-mountain section, and know from personal experience that most of the hotels supply some sort of game regularly to their patrons during the entire year. In addition to this, one can nearly always get game of various kinds at any of the better class of restaurants. This demand will soon cause its practical extermination.

I enclose a circular from a professional duck hunter, showing his kill for last season, and as I was present on the day this man killed 168 birds I know he tells the truth. That I did not do equally well was perhaps owing more to bad marksmanship than indisposition, not having been accustomed to shooting ducks under such conditions. If the papers may be believed, on the 15th of September last many thousands of young ducks were killed within a few miles of Salt Lake. They were too young and weak to get away, and were, in many cases, killed with clubs. I believe there are many in this city who would be in sympathy with limiting the number killed if it could be done, though under existing circumstances they probably kill all they can.

Henry A. Moss, Salt Lake, Utah.

The circular enclosed by Mr. Moss is issued by Vinson F. Davis, Brigham City, Utah, and contains, among other items, the following:

"I here print my score of last season: I shot 51 days, killing 4,220, averaging 82 birds and a fraction per day."

Mr. Davis is evidently a prize game hog. Of course no decent sportsman would ever voluntarily be seen in his company. The circular he issues would appeal only to other swine like himself.—
EDITOR.

A COMPARISON.

"I started out with a few dollars," said the self-made man, "and look at me now."

"I started out with a few dollars," said the roisterer, "and look at me now. Haven't a carfare in the world."—Chicago News.

OFFICE OF
I. T. TOMLINSON
MANUFACTURER OF
The Tomlinson Cleaner

FOR SHOT GUNS
106 CORTLAND AVENUE

Syracuse, N. Y., Oct. 27, 1899.

Mr. G. O. Shields,
Editor RECREATION
19 West 24th St., N. Y.

Dear Sir:-

Enclosed find draft for \$30 to apply on account.
RECREATION has sold 3 times as many Tomlinson cleaners,
direct by mail, as all the other mediums combined which I have been
using.

Yours truly,

I. J. Tomlinson.

Two New Gun Cabinets



We have two new designs in artistic Gun Cabinets now ready.

With our four styles we can supply the wants of all classes of sportsmen.

Our Cabinets Please

The Gun Cabinet reached me yesterday morning, in as good condition as when shipped. It is "a thing of beauty and a joy forever," and a piece of furniture that all sportsmen will appreciate. I am very much pleased with mine.

F. M. CROOKS, Springfield, Mo.

Particulars Free

G. S. Hudson & Son
Ellisburg, N. Y.

OTHERS ARE NOT A
MARKER
TO
B.G.I.
GOLF GOODS
— SPECIALTIES —
FORK SPLICED CLUBS
(PATENTED)
SOCKET CLUBS.
EVERYTHING PERTAINING
TO GOLF.

Write for catalogue with
Elementary Illustration to
beginners by
JOHN D. DUNN
FREE

THE BRIDGEPORT GUN IMPLEMENT CO.
RETAIL AGENCIES:
NEW YORK 313 BROADWAY BOSTON 108 WASHINGTON ST. PHILADELPHIA 1028 CHESTNUT ST.

Tremendous Muscular Force, Endurance, Energy and Alertness

QUICKLY ACQUIRED BY THE USE OF THE

KALLITHENOS OR FORCE CLUB

"THE CLUB WITH LIFE IN IT"

Nothing ever used or conceived like it! Concealed weights and springs, plunging and bounding as it is swung, make the exercise like wrestling with a live tuing. You CAN'T use it, like other exercises, in an indifferent, half-hearted way. It brings out all your muscle and mind. Gives robust health, magnificent development, grace and celerity of movement. The club is "a beautiful piece of work," aluminum, nickel and polished steel.

Illustrated circular with introductory prices mailed on application.


THE KALLITHENOS CO.

73 EAGLE STREET

BUFFALO, N. Y.

Kindly refer to RECREATION

THE SHAKESPEARE
AN EXTRAORDINARILY
FINE
HAND MADE
REEL



For accurate, long-distance bait-casting this reel is far above anything else on the market.

Because :

Being hand made, each reel is treated individually. The painstaking care lavished on each part can be compared only to the loving treatment of the finest chronometers.

This reel is offered to those who appreciate the difference between a machine made factory job and the most careful hand-work.

A circular which describes the level winding device and other good points can be had for the asking.

WILLIAM SHAKESPEARE, JR.,
KALAMAZOO, MICH.

CHARLES AUSTIN BATES N. Y.

THE AUTOMATIC-COMBINATION FISHING REEL.

Winds the line automatically by the action of a spring controlled by the little finger of the hand holding the rod.

CHANGED INSTANTLY
from Automatic
to Free-Running.

The
Little
Finger
Does
It.



**NEVER
ANY
SLACK
LINE.**

YAWMAN & ERBE MFG. CO.
Rochester, N. Y.

Send for Catalogue. Dept. X.

For Exchange:—A graphophone, horn, ear tubes, about 30 records and a carrying case; also Merritt typewriter and carrying case. Above goods are nearly new and in good shape.* Will trade for Savage rifle, Colt's revolver, single action, using .38 caliber, '73 model, Winchester cartridge, and .22 caliber Colt's rifle, or other goods of equal value to me. R. H. Searcy, Eu-
faula, Ind. Ter.

Wanted:—One old double barrel flint lock shot gun; one old flint and steel; one old brass door knocker; one pair old cowboy spurs, with large rowels. Must be cheap for cash. Address J. C. D., care RECREATION.

For Sale or Exchange: Double barre Baker shot gun, breech loader, 10 gauge, for .25-20 or .22 Winchester rifle or \$15 in cash. Address M. R. Howland, Butte, Neb.

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Fishing rods are like human beings—their constitutions differ. One man is strong and robust, and any amount of exertion will not easily exhaust. Another man is apparently well, but has not the stamina to withstand continued effort. The difference is constitutional. There is where the advantage comes in buying a BRISTOL Steel Fishing Rod—it has the "constitution" of the strong man, and never gets tired. Our free Catalogue may interest you to learn more about the "BRISTOL." Write for it.

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BRISTOL, CONN., U. S. A.

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Why pay \$100 for a gun

when you can
get just as good
a one for

\$40 ?

For \$40 we can sell you a gun that will do as good shooting, last as long, and give you as good service in every way as any \$100 gun ever made.

THE ITHACA

is known from Maine to California and from Florida to Alaska as a

Reliable

Well Made

Close Fitting

Hard Shooting

Durable Gun

Here is what an expert, who owns one of these guns, says of it :

I have used shotguns more than 20 years and have had a wide experience with different weights and gauges.

I now have a 26-inch, 16 bore, 6 pound, No. 3 grade Ithaca hammerless. I wanted to use it at the traps, so had it made full choked, and it will put 300 pellets out of an ounce of No. 8's in a 24 inch circle at 35 yards. An ideal gun for a man not able to carry a 12 bore would be a 28-inch, 16 bore Ithaca hammerless ejector weighing about 6¼ pounds. As many targets can be broken with it as with a 12 bore; while for game at distances of 35 to 50 yards it is as effective as any 12. These remarks are based on my experience with guns made by the Ithaca company. They are fine people to deal with and they make a great gun.

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ITHACA GUN CO.

Send for catalogue
Mention RECREATION

Ithaca, N. Y.

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DAVENPORT

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ANY OTHER
MAKE

SINGLE
GUNS



They have merit, are well made, and shoot well.
Our single shot gun, with AUTOMATIC EJECTOR, is the
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Send for New Catalogue of Single Guns and Rifles

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Jinks—That man does not look smart,
and yet you say he has made a million.

Winks—Smart? He's a genius. He's a
great inventor.

"You don't say! What did he invent?"

"He invented an apple barrel that holds
scarcely anything."—New York Weekly.

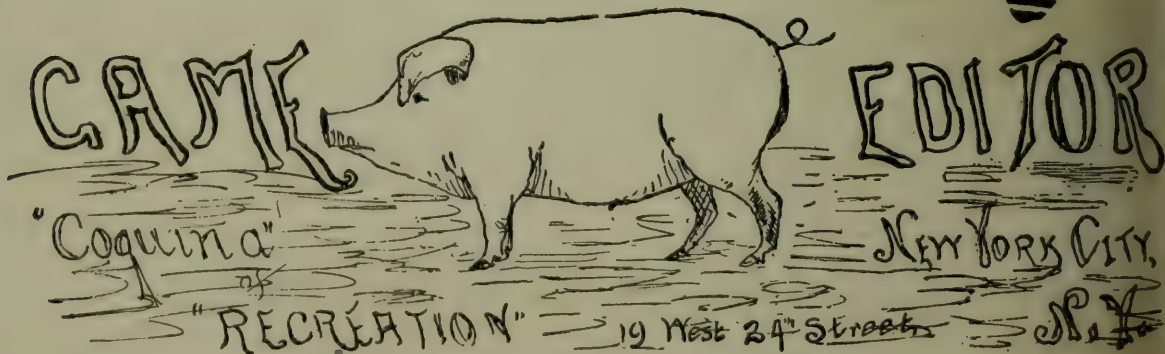
"Father," said the boy, with big serious
eyes, "I want to ask you something."

"What is it, my son?" asked the old gentle-
man, closing his book and looking wise.

"If a monkey wore shoes on his fore feet
would they be mittens?"—Washington
Star.

In 5 days return to

WILL D. JENKINS,
SECRETARY OF STATE,
OLYMPIA, WASH.



PHOTOGRAPHIC REPRODUCTION OF AN ENVELOPE THAT BROUGHT A LETTER ALL THE WAY
FROM OLYMPIA, WASHINGTON.

We have 9 Hammerless Guns made by Messrs. J. P. Clabrough & Bros., which we will close out at the following

NET CASH PRICES

3 Guns	Fine Damascus barrels, nicely engraved locks, 12 bore, 30 inch, 7 to 7¼ lbs., made to sell at \$60.00 <i>net</i> .	\$45.00
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We are closing out these guns at less than cost, as the high duty on them does not warrant us importing them any more.

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TARGET CHAMPIONSHIP OF AMERICA

WON WITH
... **A** **B**aker Hammerless

...BY...
W. R. CROSBY
MAY 20, 1899
AND AGAIN, JUNE



BAKER GUN AND FORGING CO.

Write for Quarterly

BATAVIA, NEW YORK

Wing Shooting Made Easy



A new system of sighting shot-guns, so effective that the novice finds but little difficulty in killing the most rapid birds. No sportsman's outfit is complete without a

BARGER SIGHT

(Patent applied for)

It has proved itself a winner and will greatly increase the skill of *any* wing shot. Made of high grade steel, will not mar the finest barrels, can be adjusted or removed in a minute's time and will last a lifetime. Prepaid to points in the U. S. or Canada for \$1.00. Give bore, length of barrel and whether single or double. Remit by P. O. or Express money order. Circular sent on application.

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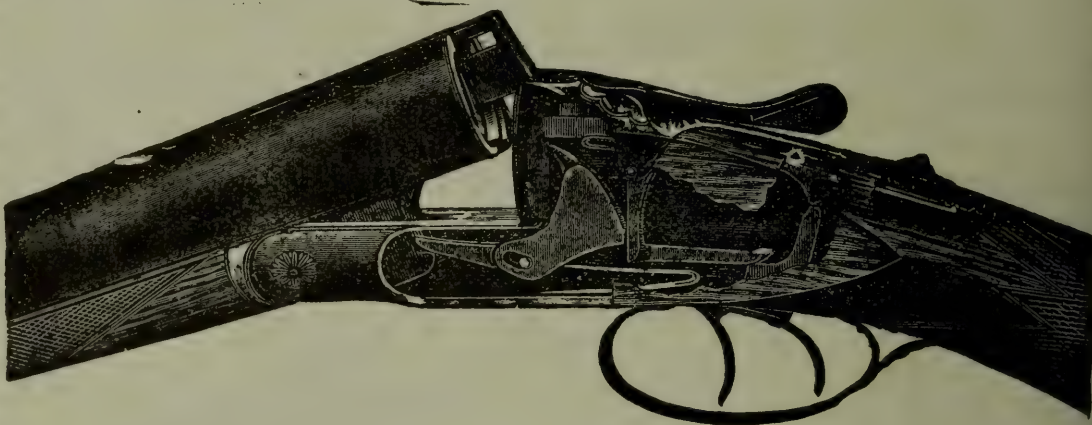
Keep Banging Away! —

If you are shooting at the traps and using the

SYRACUSE HAMMERLESS

✻ ✻ EJECTOR GUN ✻ ✻

you are dropping your birds with great regularity. Buy a Syracuse Gun (made in all grades) and keep banging away. You need never fear anything is going to give out. Just shoot, and, if your gun is pointed right, you will kill your game.



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Always wins on its merits. Its record for the season of 1899, in all leading tournaments, has never been equalled for phenomenal shooting. Scores ranging from 92% to 99 1-5% made by Amateurs shooting the Parker Gun have been frequent.

Insist upon your dealer supplying a genuine Parker Bros. Gun, and don't be deceived by the statement that any other make is as good.

Send for catalogue.

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NEW YORK SALESROOM:

96 Chambers St.

Have just returned from a 2 days' trip in the woods. Joseph Kalbfus, secretary of the State Board of Game Commissioners, captured a trunk full of birds belonging to some New York parties, 45 grouse, a number of rabbits, quails and woodcock.

Harry M. Beck, Wilkes-Barre, Pa.

Will some reader of RECREATION inform me how to tan a rattlesnake's skin?

Old Subscriber, Kent, Conn.

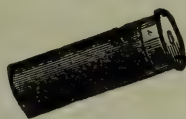
I was out one day during the season and got 10 woodcock.

W. B. Haynes, Akron, Ohio.

RECREATION ONE YEAR AND A MEMBERSHIP IN THE L. A. S. ONE YEAR FOR \$1.50. IF YOU ARE A FRIEND OF GAME PROTECTION MAKE THIS OFFER KNOWN TO ALL SPORTSMEN OF YOUR ACQUAINTANCE.

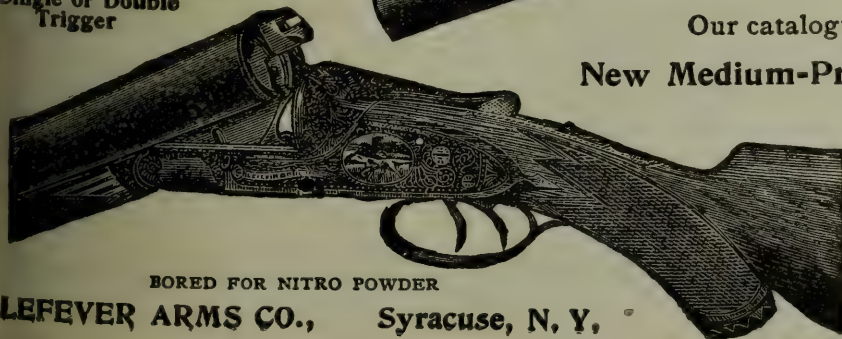
You are not up to date unless you have seen the

Ejector and Non-
Ejector
Single or Double
Trigger



IMPROVED LEFEVER

Our catalogue describes our
New Medium-Price Hammerless



BORED FOR NITRO POWDER

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This New Trap and Field Gun meets the requirements of sportsmen who desire a first-class and reliable gun but are not prepared to buy our higher grades.

WHY DID Du Pont Smokeless

?

WIN THE HIGHEST AVERAGE

AT ALL THESE TOURNAMENTS?

The Budd-Gilbert Tournament, August 23, 24 and 25, 1899.
Portland (Me.) Interstate Tournament, August 9 and 10, 1899.
Providence (R. I.) Interstate Tournament, July 19 and 20, 1899.
Denver (Colo.) Tournament, July 7-9, 1899.
West Virginia Sportsmen's Association Tournament, June 20-22, 1899.

Chamberlain Cartridge Co.'s Tournament, June 13-16, 1899.
Sidell Gun Club Tournament, June 14 and 15, '99.
Bellows Falls Interstate Tournament, June 14 and 15, 1899.
Sioux City Tournament, June 6-9, 1899.
New York State Shoot, June 5-10, 1899.
Iowa State Shoot, May 22-26, 1899.
Illinois State Shoot, May 9-13, 1899.

DuPont Smokeless also won more money at the Grand American Handicap of 1899 than all the other powders put together.

DO RESULTS PROVE ANYTHING?

Draw Your Own Conclusions

Send for Descriptive Circular

E. I. DuPont de Nemours & Co.
WILMINGTON, DEL.

Mention RECREATION.

TRADE

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PETERS
PERFECT
PROJECTILES
PLEASE
ARTICULAR
EOPLE,
RODUCING
ROFITABLE
ATRONAGE.



No black powder behind a bullet! On account of its wonderful action in Rifles and Pistols, King's Semi-Smokeless has been adopted in all metallic cartridges (excepting smokeless) without advance in price.

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A. L. Peters, Agt., St. Paul, Minn.; Hibbard, Spencer, Bartlett & Co., Chicago; and best trade everywhere.

I had a good chance to try the Shattuck gun. It is excellent and makes a very even pattern. I went hunting with 3 friends and 2 dogs. We did not slaughter all the game in Ohio. We had lots of sport and went to our homes at night with 6 rabbits and one red squirrel. They were all we wanted. Every one of us reads RECREATION, and we remember that good book teaches us not to be game hogs, but to give other sportsmen a chance.

George H. Alcott, New London, Ohio.

Your magazine is immense and is doing lots of good. It shames many young would-be game hogs into decency. Some of the older and more confirmed porkers are almost past praying for, but RECREATION will have its effect even on them.

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His Friend—Ah, some powerful portrayal of baffled passion, I suppose?

Artist—Oh, no; it's a cab approaching a water trough!

The West End gun cabinet is a beauty and every man who hunts or keeps a gun should have one.

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This is a dense nitro-powder which is guaranteed to keep in any climate without losing its strength.

It is clean, quick and strong, giving a high velocity with a very close and regular pattern.

Considering its many superior qualities it is cheaper than any other powder on the market at the same price, o that costs less.

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SERVICEABLE
RELIABLE**
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The Price is always Right

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is one of the very few concerns that make their own wines and sell their products first hand.

No middle men, no tampering with the goods, and every bottle guaranteed according to label.

The oldest and finest wines in America. Claret wine from \$3.50 to \$10.00 per case; Sherry from \$6.00 to \$24.00 per case; Port Wine from \$6.00 to \$60.00 per case; Rhine Wine from \$4.50 to \$7.00 per case.

Anything and Everything in our line

Emerson's old 5x Rye, the finest whiskey on the market to-day, 14 years old, smooth, round and agreeable, devoid of every trace of fusel oil, and aged naturally in charred oak barrels, \$6.00 a gallon; \$18.00 a case of 12 *full* quarts.

Bottled Cocktails made with 5x whiskey, \$1.25 per quart.

Recreation Case

containing 3 quarts 5x; 3 quarts Manhattan Cocktails; 3 quarts Table Claret; 3 quarts Cabinet Port, \$10.00.

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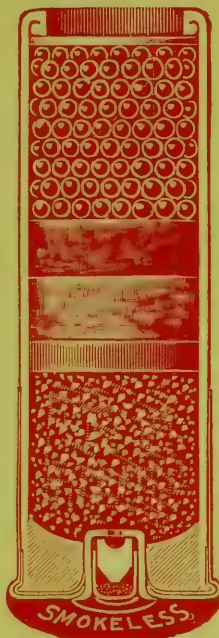
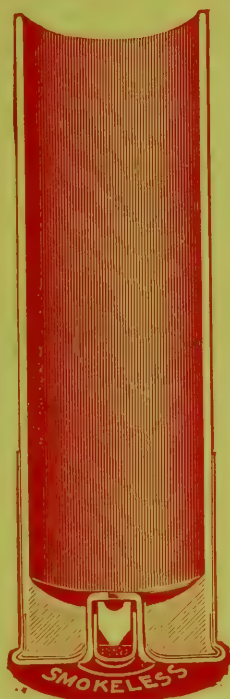
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NITRO POWDERS

All sportsmen know that the hands and arms, in shooting, become accustomed to the recoil produced by any uniform charge—and that the slightest unexpected variation of load will make a perceptible difference in their marksmanship. ❀



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The THREE requisites of a perfect gun

QUALITY

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can only be obtained after years of experiments

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sachets, toilet waters and dental powder

corresponds to the "Sterling" mark on silver.

In this issue **Hunting on the Pungwae River;** A Novel Story of South African Game, By A. C. HUMBERT. Full Page Drawing by KARLRUNGJUS.

VOLUME XII.
NUMBER 3

MARCH 1900

\$1.00 A YEAR
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RECREATION



AMATEUR PHOTOGRAPH BY A. C. HUMBERT
SCREECH OWL.

PUBLISHED BY G. O. SHIELDS (COQUINA)
23 WEST 24TH ST. NEW YORK

CW TRAVER

OFFICIAL ORGAN OF THE LEAGUE OF AMERICAN SPORTSMEN

The Gypsy Moth in Massachusetts; A Striking Plea For Bird Protection, by A. H. KIRKLAND. Illustrated.

STEVENS

"Favorite"

is rightly named, for no other rifle is so great a favorite with American boys. There are more "Favorites" in use to-day than there are of any other small calibre rifle made. Their accuracy establishes the standard by which the accuracy of other rifles is measured. If a dealer does not keep the Stevens "Favorite," he'll probably try to sell you something else which he'll say is "as good as the 'Favorite'" — but it isn't. Don't accept it, even though he offers it cheaper — it'll be dearer in the end. "Favorites" are cheap enough; they cost only

\$6.00 With Open Sights.

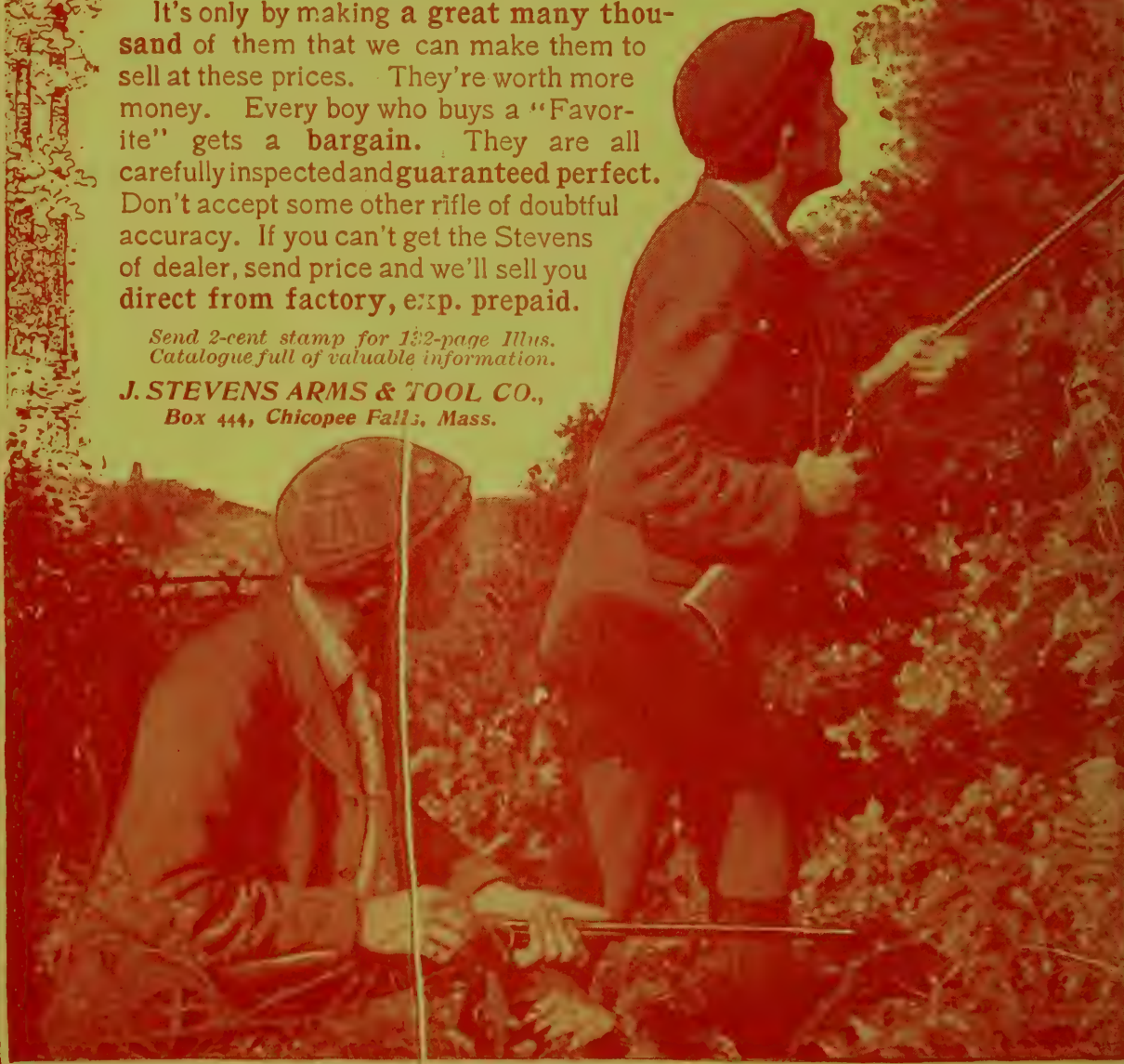
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*Send 2-cent stamp for 132-page Illus.
Catalogue full of valuable information.*

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Box 444, Chicopee Falls, Mass.



RECREATION

Copyright, December, 1899, by G. O. Shields

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\$1.00 A YEAR.
10 CENTS A COPY.

G. O. SHIELDS (COQUINA),
Editor and Manager.

23 WEST 24TH STREET,
NEW YORK.

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The above is one of the greatest bargains ever in market for a good, reliable, accurate shooting pistol for house or office, or for target shooting, or to take into the woods, the old "COLT NAVY" having a world wide reputation; some of them are in round barrels and some in octagon. These have been in use by our Government and are in nice order and condition. Orders sent by mail or express must be accompanied by Cash or Post Office order.

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Guns

Fine hammer and hammerless

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Also fine **Swedish Leather Jackets**, finest Garment made and impervious to cold
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Our Two Part Pneumatic Mattress.

MR. YOUNG, THE INVENTOR, EXPLAINING THAT EACH MAY HAVE HIS SIDE HARD OR SOFT, AS HE PREFERS

A mattress for home use, that you can deflate and take with you on the tramp, into camp or on board your yacht. It makes no difference where it is used or how rocky, rough or damp the ground may be, it is always the same—the perfection of a bed.

Our two part mattress is, in reality, two separate mattresses. Each half is 27 x 75 inches and weighs 11 pounds.

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Pneumatic Mattress & Cushion Co., Reading, Mass.



HOUSE FOUNDED 1839

Brotherhood Wine Company

Brotherhood Building, New York City

is one of the very few concerns that make their own wines and sell their products first hand.

No middle men, no tampering with the goods, and every bottle guaranteed according to label.

The oldest and finest wines in America. Claret wine from \$3.50 to \$10.00 per case; Sherry from \$6.00 to \$24.00 per case; Port Wine from \$6.00 to \$60.00 per case; Rhine Wine from \$4.50 to \$7.00 per case.

• Anything and Everything in our Line •

Emerson's Old 5X Rye the finest whiskey on the market to-day, fourteen years old, smooth, round, and agreeable, devoid of every trace of fusel oil, and aged naturally in charred oak barrels, \$6.00 a gallon; \$18.00 a case of twelve FULL QUARTS.

Bottled Cocktails made with 5X whiskey, \$1.25 per quart.

RECREATION CASE

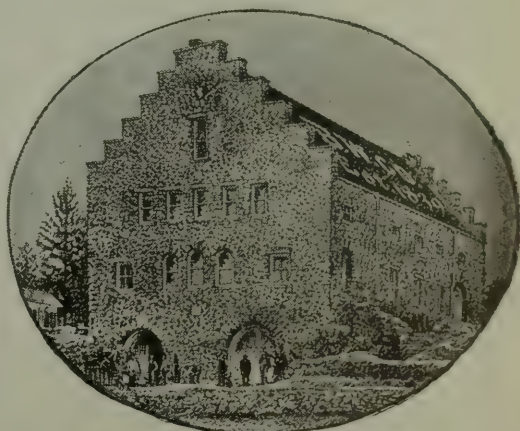
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Send for price list and cook book containing over two hundred recipes for cooking with wine and over fifty different formulas for making fancy drinks at home.

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Company**

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Main Entrance to Old Vaults, Washingtonville, N. Y.

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Catalogue No. 14

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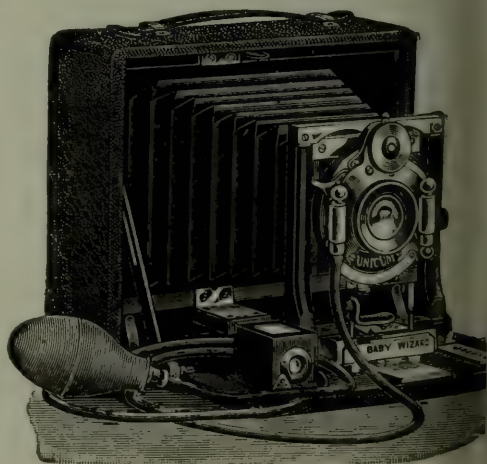
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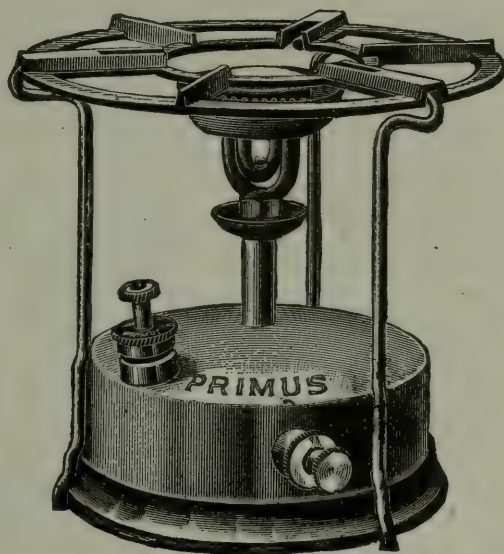
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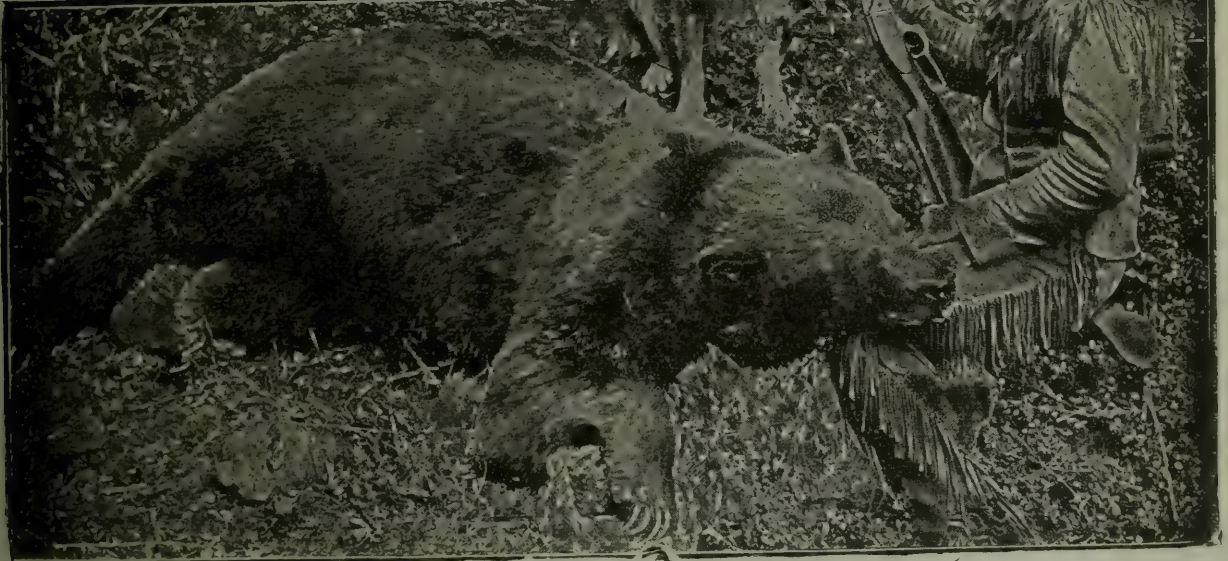
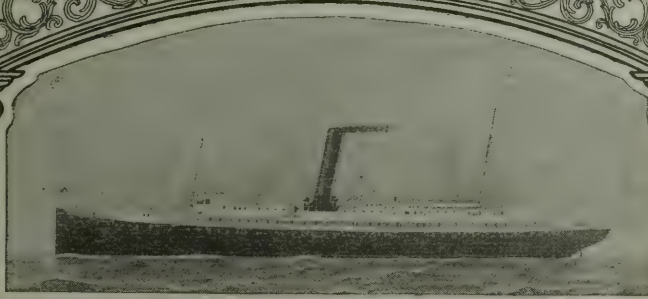

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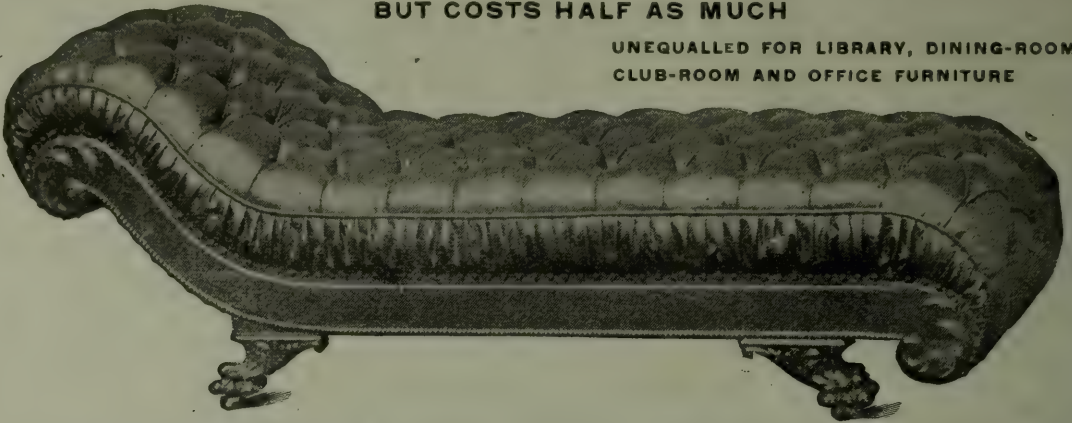
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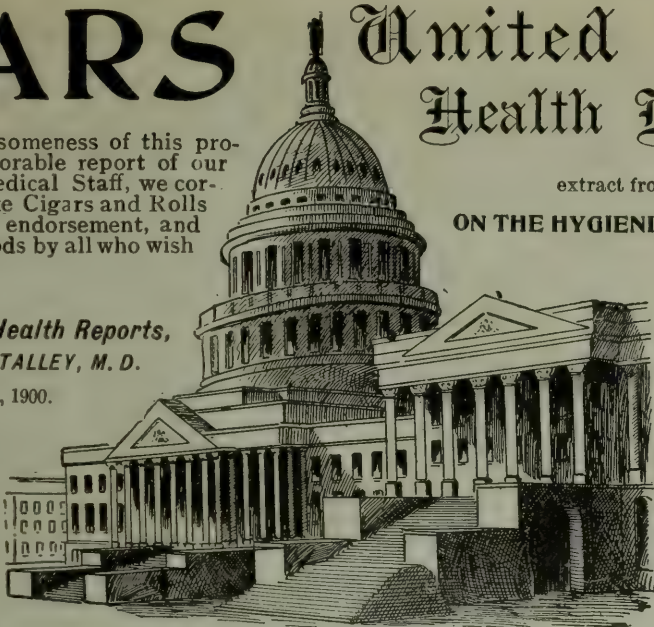
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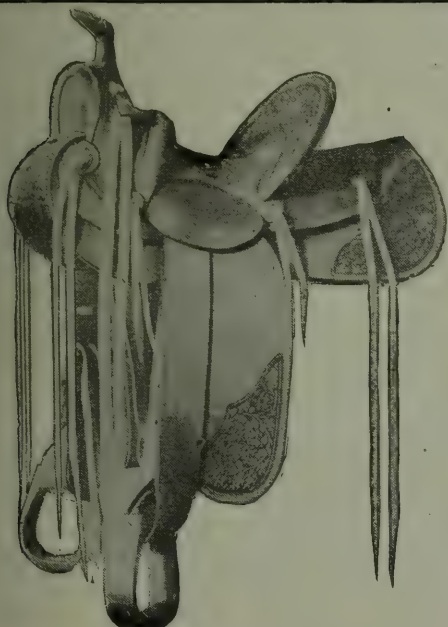
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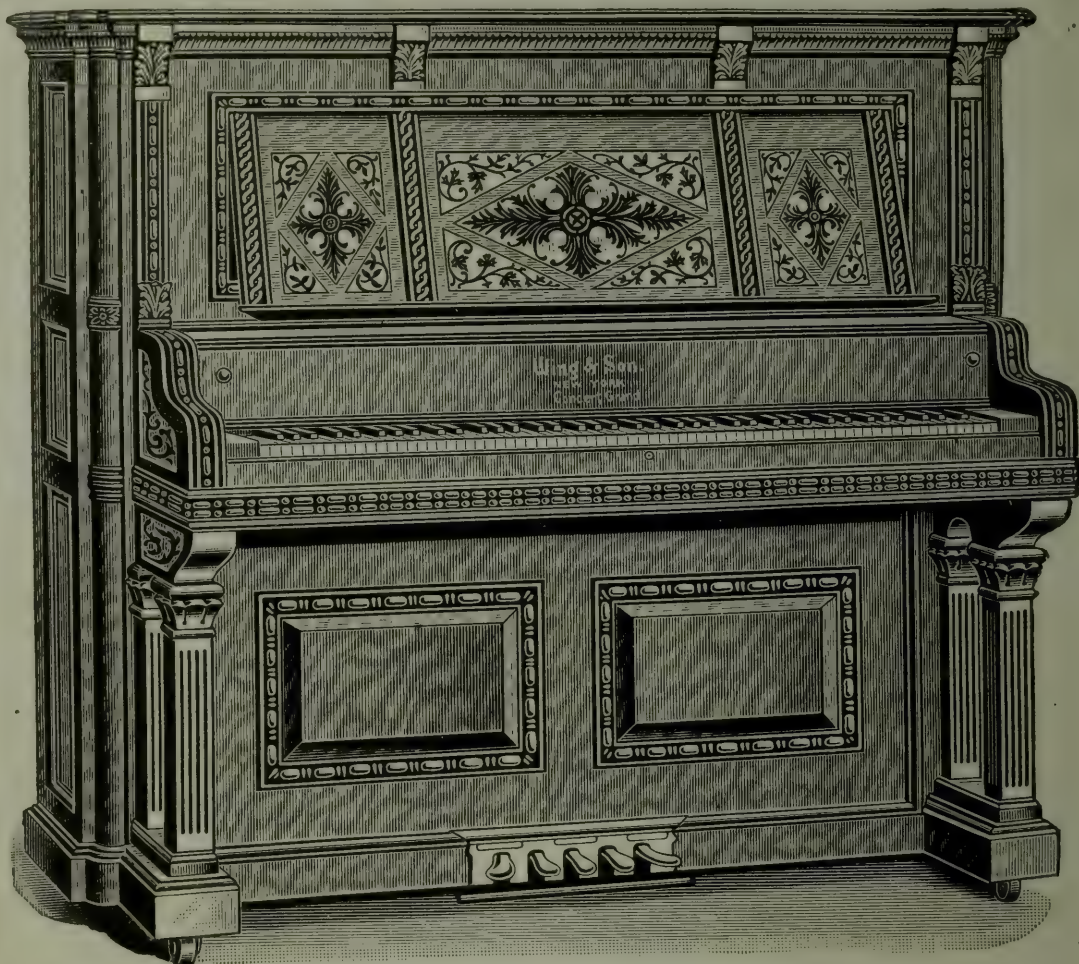
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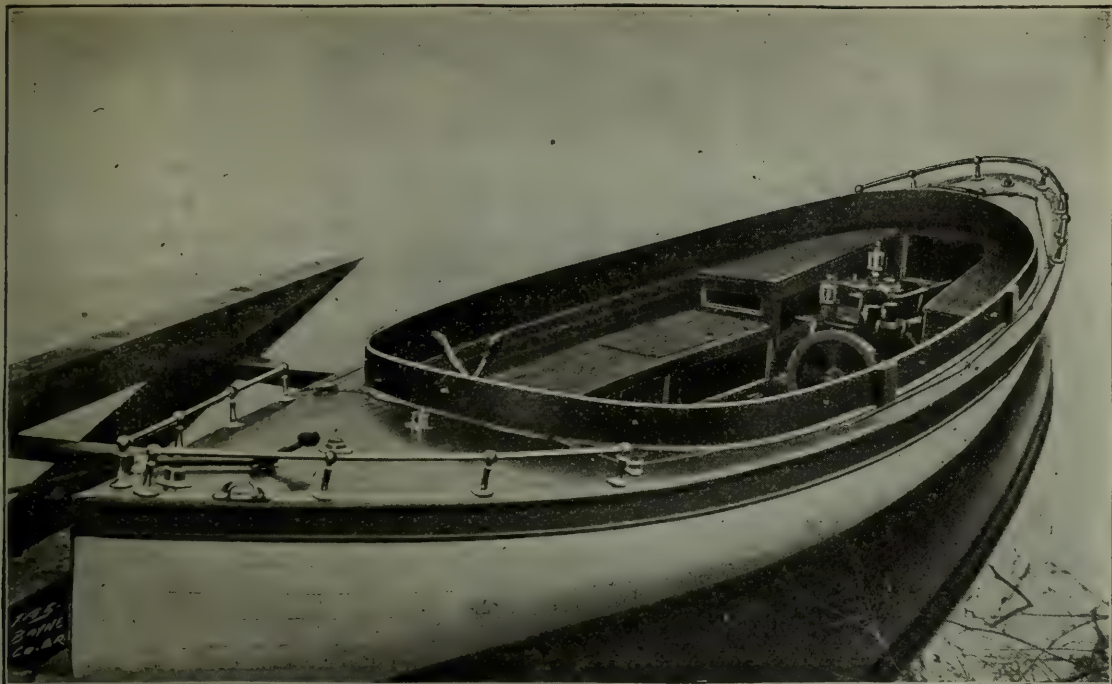


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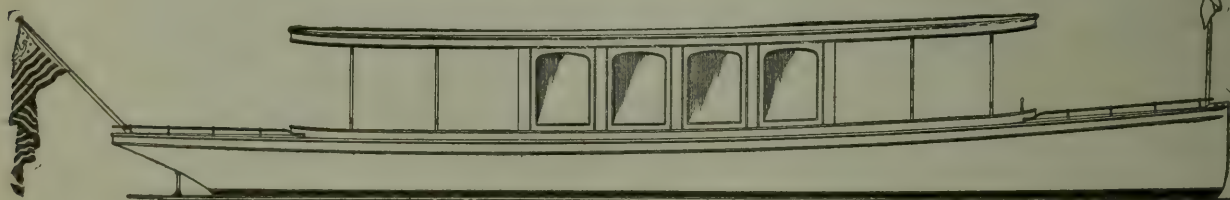
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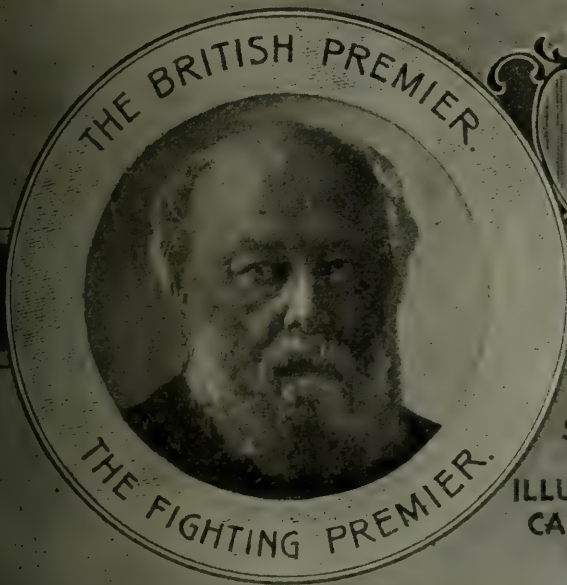
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To-day Schlitz agencies so dot the globe that when it is midnight at one it is noonday at another.

The quality by which Schlitz beer has won has been its absolute purity. Every physician—every man who knows the value of purity—the world over, will recommend it.



"JUST AS HE STOOD ON THE PUNGWAE FLAT."

RECREATION

Volume XII.

MARCH, 1900.

Number 3.

G. O. SHIELDS (COQUINA), Editor and Manager.

HUNTING ON THE PUNGWAE RIVER.

A. C. HUMBERT.

July 9th, 1895, mounted on my best shooting pony, and followed by my best native carriers, I set out for a day's hunt in the valley of the Pungwae, in Portuguese East Africa. Game of many species was abundant at that time, and one could have a shot every 15 minutes, all day long, if disposed to reckless killing. There were buffaloes, hippos, zebras, a dozen species of antelope, several varieties of deer, wild hogs, and smaller mammals, not to mention the many large birds.

We were following up the Pungwae and hunting the flats between that river and the Zambesi. During the early morning hours we traveled through dense clouds of fog that hung like huge white blankets on the veldt and rendered our progress disagreeable. The high grass deposited barrels of water down our backs as we rode through it; so we longed for the sun to come out, dispel the vapor and dry our saturated clothes, which hung to us like wet bags. Frequently we heard heavy game at close quarters, but could not see it on account of the dense fog and the rank grass.

Gradually the sun climbed into the heavens, the clouds parted and the grass dried off. Toward noon I heard the heavy tread of a big band of buffaloes. I dismounted and approached cautiously until I realized they were somewhat scattered and that I was in the very midst of the herd. After a long and careful search

I saw a large bull, scarcely 30 yards away. I parted the grass silently, drew my rifle to my shoulder and fired through an opening in the reeds which gave me only a faint glimpse of his shoulder. The report of my 12 bore stampeded the herd and they went crashing away—more than 300 of them—making a noise like thunder and fairly shaking the veldt under their feet.

Standing as I was, submerged in grass that reached far above my head, I listened to the roar of hoofs and the crashing of vegetation with fear and trembling, for I expected every minute to be trampled under foot by one or more of the frightened beasts. I saw several of them pass within a few feet of me. Their large, black bodies covered with dry mud and supported by their short, stocky legs presented a most gruesome picture.

A wounded bull had hunted me on a previous occasion, and I did not relish the idea of another such encounter. I felt no compunctions of conscience at giving the lions an occasional feed from a carcass of one of these great brutes, nor for leaving a choice bit of buffalo meat for the hundreds of vultures that hovered over the veldt.

The bellow of a wounded African buffalo is by no means pathetic. On the contrary it sounds angry and full of vengeance and is as awe-inspiring as the roar of a lion. Though I have never heard a wounded lion roar, I

have frequently heard them at night, quarreling over a kill near my camp, and their voices, even then, are by no means musical.

At last the buffaloes all got away and I could once more breathe freely. Unable to see the effect of my shot from where I stood, I parted the jungle and approached cautiously, with my rifle ready for instant use.

When my carriers came up we went to the old bull and found him dead, with a bullet through his shoulders.

When we found he was a superb specimen, I seated myself on his carcass and took a drink of tea, a beverage we always carried with us when hunting in Africa. The thick hide of my buffalo was nearly hairless, though a few long, bristly hairs grew in scattering bunches, holding the thick cakes of mud that covered his body. His skin was deeply scarred, where his many antagonists had raked him fore and aft. I saved his horns and, ripping off his burly hide, left him to the thousands of vultures that were waiting for the feast. We were scarcely 50 yards away, when the carcass and the ground all about were black with them.

We followed the game trail skirting the lagoons, frequently peering into the stagnant water holes that lay 20 to 30 feet below us. From the banks we saw many crocodiles slide into the water and through the vegetation that overhung the pools we saw an occasional hippo rise to the surface and blow. Once I was startled by a ground hog that rushed from his hole to cover, passing close to my pony's

heels. These holes, nearly hidden by the rank grass, were a constant menace to our safety and I got one beautiful tumble on account of my horse stepping into one of them. The ant hills, on the contrary, are points of vantage on the level veldt, and from those I often sighted game which I could not otherwise have found.

Late in the afternoon of the day I killed the buffalo, I climbed a big ant hill, peered over the tall grass and saw, in a small clearing, a bunch of zebras and a bunch of water boks, grazing near together. An old water bok with long, spiral horns stood alone. He had heard the footsteps of my pony and looked toward me, listening. He had a perfect head, and, taking careful aim at a vital spot, I fired and he fell. I was then using one of the new .30-30 Winchester rifles, with smokeless powder, and was anxious to know the result of my shot, yet hesitated to show myself. At the report, the bewildered herd of water boks ran together and looked about for danger, while the frightened zebras dashed away at full speed, circling around the boks and passing close to the ant hill that hid me from their view. If I had only had my camera at hand I could have had a beautiful picture of them; but unfortunately my pickaninny, who carried it, was far behind.

In the frontispiece of this issue of RECREATION Mr. Rungius has reproduced the amphibious bok, just as he stood that day on the Pungwae flat, and has given a good idea of the rank growth of grass that covers that wild veldt.

MARCH.

Old Boreas wildly raves and shrieks,
Almost to bursting swells his cheeks,
And strives with savage might to slap
The maiden Spring from Winter's lap.



AMATEUR PHOTO BY GEORGE T. BAKER.

QUAIL SHOOTING IN TENNESSEE.

Winner of 31st prize in RECREATION's 4th Annual Photo Competition.



AMATEUR PHOTO BY A. H. VERRILL.

LAYIN' FOR CHUCKS.

Winner of 33d prize in RECREATION's 4th Annual Photo Competition.

THE TRAIL TO PARADISE.

E. J. MYERS.

Fancy flies far from the crowded space wherein we store trinket and trophy—printed book and painted scene—that weary and disquiet our souls. The homing instinct for solitude where peace abides sets aquiver every fibre of our being.

It is a far, far cry from the busy marts, the crowded thoroughfares, the swarming hives of men, "the houses that stand up on end like coffins in an undertaker's shop," to where the wind sighs through the virgin forests, where the wild violet and rose bloom and the vines festoon the trees, where the green thickets are filled with singing birds, where through skies the eagle soars with prey in talons for the eaglets in eyrie, where the rabbit leaps from the brush at the very feet of the wayfarer, where the bear tracks show that no dew has yet fallen in them, and the scattered earth around the caribou's hoofmark yet holds the scent!

Rod and gun, hunting knife and rifle, moccasin and red seal boot, snowshoe and ski, cedar paddle and steel pointed pole, head and hoof, wing and hide, are baubles on the walls of my den, as dead as the dust on my books.

My tale of work in well considered order
Lies fair before me on the laden desk;
But nothing in me speaks save dreams that border
The grave with the grotesque.

Whither trends that instinct? For the walls fade like darkened scene as Fancy roams from Labrador to Alaska, from Nepigon to Tampa bay. Hark to the sound! 'Tis the echo of the gun or the scream of the reel, the clack of the iron on Patty Majaw's shingle.

All and all, 'tis the song of steel; not heard

Among the jumbled heap
Of murky buildings: climb with me the steep
Nature's observatory—whence the dell
In flowery slopes; its river's crystal swell
May seem a span; let me thy vigils keep
'Mongst boughs pavilion'd where the deer's swift leap
Startles the wild bee from the foxglove bell.

No silken thread unrolls from magic sphere, as at Ariadne's command, to take us through the maze of wearying fret and fever.

Nor Genii spread the enchanted Prayer Rug, that rising and flying through the empyrean, Aladdin-like, shall transport us, hungering and craving, to the Land of Heart's Desire!

In Boito's Mephisto, the last strains of the voice die away, the final lingering cadence sobs itself out on the first violin,

the pulse-beating throbs of the harp faint away, when through the silence, in which the very breath is held for fear of sound, one great note breaks the silence and holds the throng beneath sublimer spell! It utters joy and pleasure, it intones pathos, sorrow and misery, it clangs in dissonance, it peals in exultant discord, for above all, it is the Voice of Steel!

It is the indescribable clash of sabre against sabre. It is the crack of the rifle, the whimper of the bullet and the shriek of the shell! It is the wild transport that arouses all the dormant bequests our fore-gangers left, and makes us hark back and double on our trail, flying from the environment of to-day to the savagery of the past!

On the thin, keen edge of the damascened scimitar, as compensation for dashing prowess, as the reward of uttermost courage, the only prophet of Allah promised the faithful that they should pass as on a highway of steel to Paradise.

The tiny white ivory disc that flashes into sight the briefest interval, the line of vision from Keen Desire down the damascened steel to the fear-stricken flying quarry, the fiery blaze, the hurtling missile mocking vision, a change of motion in the moving something—its disappearance. Then hope and disappointment, exultation and triumph, as victor looks on vanquished. It is the Voice of Steel that salutes in Paradise!

What recks the cost—what regrets for stricken quarry? 'Tis but the trophy that counts! Arrested headlong flight of azure-defying fowl, gaunt grizzly terror of mountain pass, striped panic of jungle thicket. 'Tis but too oft a single shot that sums a compensation that mocks all effort to lessen the reward. "Good hunting!"—the Voice of Steel rings a chime in Paradise!

The fang of barbed steel gaudily garbed in sheen of sun, radiant feather and glittering tinsel, impelled by daintiest wands—so willowy that they droop and sway 'neath their own weight, so slender and stately that they shame the grace of the swan or the rhythmic swing of Aideen's jewel-hooded serpent, so slim and frail that they seem to deny their fitness and vigorous stamina.

Yet farther and farther flies the feathered gaud on falling patch of foam in neutralised meet of waters 'neath the falls, or swimming in the long reach of pool, carries deception and death to the warriors

that take up the gage of battle—salmon—ouananiche—trout.

The battle wages and the melody is still the same—the Voice of Steel lures Desire to Paradise.

It is a far, far reach to where Tom-Kedgwick stretches an open hand to icy, taintless, limpid waters seeking the Sea of Heat. Far off is Gaspé's thumb reaching into the Gulf. Long is the way to the Restigouche, where in the summer heat of Now, the drifting canoe wherein a grim angler and taciturn *voyageurs*, battling with a 40-pound salmon, come upon moose and deer seeking refuge in the "Lie" before they can leap up and, crashing, disappear in the forest.

With the wind 'gainst me on Matapedia river I have seen moose and calf stare at us until the guides could have hit them with thrown paddle.

Farther on, where French and Gaelic still linger, in Cape Breton and Prince Edward island, it is but a few years ago that it took well nigh a fortnight's faring to reach rivers whose waters now hold trout sufficient to satisfy the greediest appetite, and where the salmon lie motionless in the pool, for the flies are ever taken by trout before the salmon can rise!

Up these rivers, even though reserved and jealously guarded, the trout fisher may go unmolested, as of right, by courtesy never denied modest request of angler.

In some old outhouse beneath the dignity of a barn, in Prince Edward or West Cape Breton, you will find the old coach that served as carrier a hundred years ago, and some old man's form will straighten and tower, and bleared eyes will brighten and flash at memories of whip on the box, or stories of a chase that still can be realized as of old, on barrens that hold moose and caribou. Down the slope for use yet in the winter's snow, oh, they fall deep and heavy and they lie long and dreary, the old sled rests weather-stained, beaten and worn! It, too, can tell stories of hardship, distress, want and peril.

For days of coach and sled and toboggan are past! For then was faring long and arduous; much time and effort were required and the trails deterred the stoutest-hearted and shook the resolution of the most determined.

Another trail has been made whereon the moccasin foot does not tread, *courrier du bois* does not travel, the hoof of horse does not beat! No guttural "ugh" breaks the stillness as of yore, when single file braves flitted through the ways. No "Quae, Quae," passes in greeting from lip to lip of Montagnais or Mic-Mac, nor campfires blaze through the forests. No

canoe lies buried, no stores are cached; no tepee hidden in out ways, for shelter awaits the wayfarer on the trail!

No, this trail is a steel thread, and it mocks the river and the barren and laughs at the mountain.

Out of Montreal, along the St. Lawrence, passing through Levis, down to Rimouski, whence it leaves the river and strikes southward to Truro, where it forks, and one trail goes Northeast to Sidney, and thence to Newfoundland and Labrador, and the other trail fares Southward to Halifax.

It is the Song of Steel in its highest form that makes the traveler take this trail! The Song of the Rail chanting the flight of the vestibuled caravansary of the Intercolonial—the Maritime Express. Along the trail it leaves its track in wreaths of white mist, blowing through cloudless wintry skies or clouds of dark smoke lying wreaths low on the tree tops and lower down on the greenish white "mishes" and barrens in summer time.

Sleep comes to the traveler on beds that rival balsam plume, rocked by the tireless flight that kills distance in the night!

Breakfast waits without hurry to the most indolent, and dinner is served indulgent to the sportsman, who suffers soup to cool as he marks the far-famed pools of the Metapedia, flowing through the Lovely Valley of Music, or the tourist, who, spell-bound over scenic splendor or marvel of far-famed tidal fall of Fundy's bay, looks up to see faultless attention reserve a dinner he had forgotten as the "Maritime" speeds onward.

As though it were flight of the Enchanted Prayer Rug laughing back at the moose and caribou and keeping flight-pace with the wild fowl, the "Maritime" passes down the thousand miles of the Intercolonial steel trail and leaving Montreal Sunday evening bears the sportsman to Newfoundland at daybreak of Wednesday. At Sidney, to cross the straits, the Bruce awaits, with Captain Du Lany at the wheel, and never mind the ice in winter, or fog in summer. Pilot and ship are but the ending of the trail in watchful guarded safety.

Sea-bound, rock-ribbed, scarred and seamed by ice in winter, and storming waves throughout the balance of the year, Newfoundland lies at the outer gate to take the brunt of every Westward storm.

Thither on drifting, measureless plains and mountain ridges of polar ice come bear and seal that but too oft tempt the hardy inhabitants to their death. In winter, perforce, the dwellers seek shelter in wooded dell and valley, subsisting on caribou and game as best they may, for the

coast has for ages been stripped of timber save some hoary, gnarled and tempest-maimed sentinel of pine or spruce that only indifference permits to stand, and excepting the scrawnik, that denizen of the storm-swept headland that cumpers the ground.

In spring and summer the fisherfolk seek the cod and the salmon, to make the most of a fickle and ephemeral harvest, all the briefer since who can reap with surety where none hath tilled or sown! Welcome to the meal that delights the giver for the sumptuousness, if it be sweetened tea and biscuit, for the fish must go to the storekeeper to pay last year's debts and secure the winter's food. But, oh, when the net is swept away, what awaits to soothe despair if it be by storm or ship! And, oh, sadder yet, too deep for woe, when the skiff goes to wreck.

"Well is it with the salmon, ranger of her rivers;
Well is it with the mackerel shoaling in each bay;
Dear is all the land to the lonely snipe and curlew;
Ay, but for its manfolk—a bitter lot have they.

"These about the ways, God's air is free and spacious;
Warm are the chimney corners there, warm the kindly heart;
There the soul of man takes root and through its travail
Grips the rocky anchorage till the life strings part."

It is but a year or two ago that a new guide book said, "The tourist who wishes to visit the Northeast coast of Newfoundland will need allow himself a clean month," and yet it has become as "a yarn of ancient weft" when the hunter goes on the trail of the Intercolonial to find the single shot that makes "good hunting."

No tent is necessary, no lean-to or rude shack need be built, for the "Log Cabin," a handsome modern shooting and fishing lodge, with every convenience for comfort, lies in the Heart of Paradise.



HAVE JUST FED MY BABIES.

Winner of 35th prize in RECREATION'S 4th Annual Photo Competition.

AMONG THE BLACKTAILS.

H. C. WILCOX.

Still hunting in Pennsylvania has become a thing of the past. Lumbering operations have transformed this former paradise of sportsmen into barren wastes. Bears, deer, and speckled trout, formerly numerous, are nearly extinct, and the hunters who once made annual pilgrimages to Pine creek, Cross Forks and Sinnemahoning creek for game and trout, are compelled to seek localities where their favorite pastime of still hunting can be indulged.

"What do you all say to a trip to the Rockies?"

"The proper thing to do; let's start in September."

So, September 8th found Roy, Harm, Alf, Vol and the Scribe on board the Santa Fe train *en route* for Denver, where we were to be joined by George and Frank, completing the party. The ride over the prairie recalled tales we had heard of the Indian, elk, antelope and buffalo, while the mountains suggested thoughts of the grizzly, cinnamon and black bear. We reached Denver on the 10th, where George had been waiting several hours, fearing the train would be ahead of time.

The curio stores of Denver are novelties.

Here may be seen Indian relics, heads of buffalo, mountain, sheep, deer, antelope, coyotes, timber wolves, etc., with innumerable specimens of polished stones of beautiful colors. We visited the mine where gold bricks are moulded. One with the value \$17,183.66 stamped on the side, gave Vol a surprise when he attempted to pick it up for closer inspection.

Continuing our journey via the Denver & Rio Grande railroad to Wolcott, we passed through the Royal gorge in the early morning. The gold crowned peaks of the mountains were grand beyond description in the morning sunlight.

At Wolcott arrangements had been made for guides and outfit for a trip 75 miles into the mountains. The natives smiled knowingly when our .30 calibre Winchesters were brought forth, mistaking them for .22 calibre rifles as we were afterward informed by our guide. After a hearty dinner served by Mrs. R. J. Wilson, who also furnished the teams and guides, we started for Williams river mountains.

We made our first camp on Grand river where we had expected to get trout for breakfast, but placer mining above kept the water muddy and saved their lives. On the road to McCoy's ranch we passed near a salt spring which resembled the crater of

an extinct volcano, furnishing a large stream of salt water. Johnny, our driver, said the spring had no bottom.

Passing Red Dirt divide, we flushed our first sage hens, bagging a portion of the flock, a fact which was a source of regret when they were served at breakfast. Sage hens should be very young, drawn immediately after killing (before if possible), served to hungry people with good teeth and possessed of an aching void in their equatorial regions.

We made our next camp at Finger rock, which appears as if pushed up from the earth 200 feet, and resembles a giant finger.

Passing through Yampa in the forenoon we sighted a peculiar mountain resembling an immense grave, with a boulder placed at the head for a monument.

"What is that mountain called, Johnny?"

"Hats off and show respect to your ancestors. It is the Devil's Grave!"

This being satisfactory, we uncovered.

Passing through Egeria Park some of the party shot at a prairie dog, when Johnny shouted:

"There they go! Give it to them quick!"

Two deer, evidently alarmed by the shot, broke cover in the quaking aspens and started across a stretch of sage brush. The response to this call was generous and we devoted several shots to the buck, who was taking the lead. Then the doe halted on the brow of the hill, and turning my Winchester on her I broke her back at the first shot. When the deer was packed to the wagon Vol measured the distance as 312 paces. This by a long man, down hill, was very satisfactory.

At Willow Creek a permanent camp was made, all hands turning in to make things comfortable, after which George and Roy took a stroll up the mountains, where Roy bagged his first deer, and the indications satisfied us we were in the paradise of deer hunters. The timber consisted of quaking aspen and scrub oak, interspersed with spruce and cedar, following the canyons generally, while large fields of sage fill the space between. It was agreed in solemn conclave that none but bucks were to be killed on any pretext, and all operations should cease when a set of horns were provided for each member of the party.

At daybreak, with Harm for a partner, we climbed the mountain in search of horns.



IN CAMP AT WILLOW CREEK.

"Do you think I will kill a deer on the trip?"

"Yes, or be run over by one before night."

The prediction was nearly verified later while Harm was taking a drink and lying directly across a runway, his gun resting on the ground near. I jumped 3 deer above him; all followed the well-beaten path; Harm was compelled to step aside to let them pass!

"What beats me is, that after I let the first one pass, the others persisted in following the path, although they must have seen me. I think they would have run over me if I had lain still. Gun? Why, I never thought of it! But (reflectively) they were does and must not be killed, see?"

Two splendid heads fell to guns before 9 A. M. The meat was packed to camp later. Several others were brought in by our party, and the second day in camp found all supplied with a pair of antlers. The remainder of the time was devoted to jerking venison and preparing the heads for the taxidermist. We finished the day by climbing the peaks, and with the aid of a field-glass watching the droves of deer come out to feed.

Hunting in the Rockies should be done on horseback, and supplies carried on pack horses, thereby enabling the hunter to visit ranges to which game resorts. Ranchmen assured us that where we were then finding deer in abundance, few would be seen 2 weeks later.

There were no bear sign in that locality. The reason was obvious. There was no shack. We had not lost any bears, but there was extreme anxiety to hunt grizzlies as soon as it was known none were in the locality!

Mountain trout abound in the streams and take the fly with generous self abnegation that is gratifying. Coachmen and brown hackle proved attractive, as no doubt other favorite flies would. While waiting for dinner in Fish creek canyon, I tried in vain to find a place clear of willows so I could cast in the orthodox manner. Failing, I tied a single coachman to the end of the line, reeled up to the knot, and worked the rod through the brush. The fly was taken as soon as it touched the water, and the trout yanked out endwise without any fancy manipulation of the fish. Under such disadvantages I captured 12 trout, weighing 6 to 10 ounces each, while Johnny was boiling the coffee. Roy declared that the mountain trout excel in flavor our native speckled ones. While willing to admit their excellence, I do not think any fish is better than our own speckled variety.

We returned via the Union Pacific, and in Nebraska were treated to some prairie chicken shooting and jack rabbit coursing by greyhounds. This was novel sport to our party, although I confess that the escape of a game old jack, after a chase of one mile straightaway, gave me more pleasure than the numerous pick ups during the day.

GUY.

W. P. MAC HENRY.

1st Year.

Guy's a wiggling, wobbling, stumbling pup,

With antics so all unplanned;
And when I finish bringing him up
He'll hunt 'em "to beat the band."

2d Year.

He ranges wide and his head is high;
All ginger, iron and sand;
And it breaks my heart to punish Guy
When he turns and licks my hand.

3d Year.

His scent is keen, and hot as hell,
And I never use the whip.
He's learned his lesson, and learned it well,
And he never makes a slip.

4th Year.

To-night he's at home, and near the fire;
The best friend I've ever had;
He's older, wiser—muscles like wire—
But his eyes are growing sad.

5th Year.

His head's still high; he's a proud old chap.
He's sick; he's going to die.
"Higher, boy—so, in my lap—
Good by, old chap, good by."

CANADIAN RUFFED GROUSE.

ALLAN BROOKS.

This is the form of ruffed grouse found in Northern Canada wherever the country is heavily timbered or swampy. On sparsely wooded country and dried up-lands the gray ruffed grouse, *umbelloides*, occurs.

The characteristics that differentiate the 4 races of ruffed grouse are so slight, however, that the species might almost be treated as a solid one. In the country between the Selkirk and the Cascade moun-

Young of this species seem able to fly earlier than those of any other species of grouse. I have never come across a brood that could not fly some distance. I should judge the flight feathers start to grow as soon as the chick is out of the shell, and power of flight is acquired within 3 days.

The ruffed grouse is a game bird that should have the most rigid protection, and sportsmen should be careful how they



CANADIAN RUFFED GROUSE.

tains, in Southern British Columbia, examples of all 4 races may be taken in a day's travel. The character of the breeding ground and environment of nest have more effect on the coloration of grouse than is caused by difference in climate. In the locality above referred to ruffed grouse inhabit every variety of country from the heavily timbered bottoms to the dry, lightly wooded hills. In the former localities the birds will average as *togata*, with an occasional *sabinii*; while in the latter the lightest colored birds represent the variety *umbelloides*. Ruffed grouse of the *sabinii* and *togata* types found on the Pacific slope have a proportionately longer mid toe than Eastern birds.

deplete their covers, for of all the grouse it is the species least given to wandering or migrating, and covers once exhausted seldom or never recover their birds. The number of 10 a day allowed by the L. A. S. code is at least twice too many for Eastern States. A New England sportsman should quit at 4 birds. Even on the Pacific slope, which presents an ideal retreat for this grouse, I have never been guilty of shooting more than 7 in a day, although I should not hesitate to kill 3 times that number of almost any species of duck in the fall and winter.

Here is a sportsman after my own heart.—EDITOR.

THE GYPSY MOTH IN MASSACHUSETTS.

A. H. KIRKLAND.

The work against the gypsy moth in Massachusetts stands unique in the field of applied entomology. The importation of the European gypsy moth, *Porthetria dispar*, dates back to 1869, when there lived in Medford, Mass., a French scientist



YOUNG PINES AND OAKS DEFOLIATED BY THE GYPSY MOTH.
Georgetown, Mass., July 11, 1899.

of note, Leopold Tovelot, who is said to have been a political refugee. In connection with some extensive and excellent investigations on silk worms, Professor Tovelot imported the gypsy moth and

abundance of stern realism in this case hundreds of property owners in Eastern Massachusetts will testify. From 1869 to the late 80's the moth waxed fat and increased; the caterpillars dropped from in-



PINE AND OAK WOODLAND DEVASTATED BY THE GYPSY MOTH.

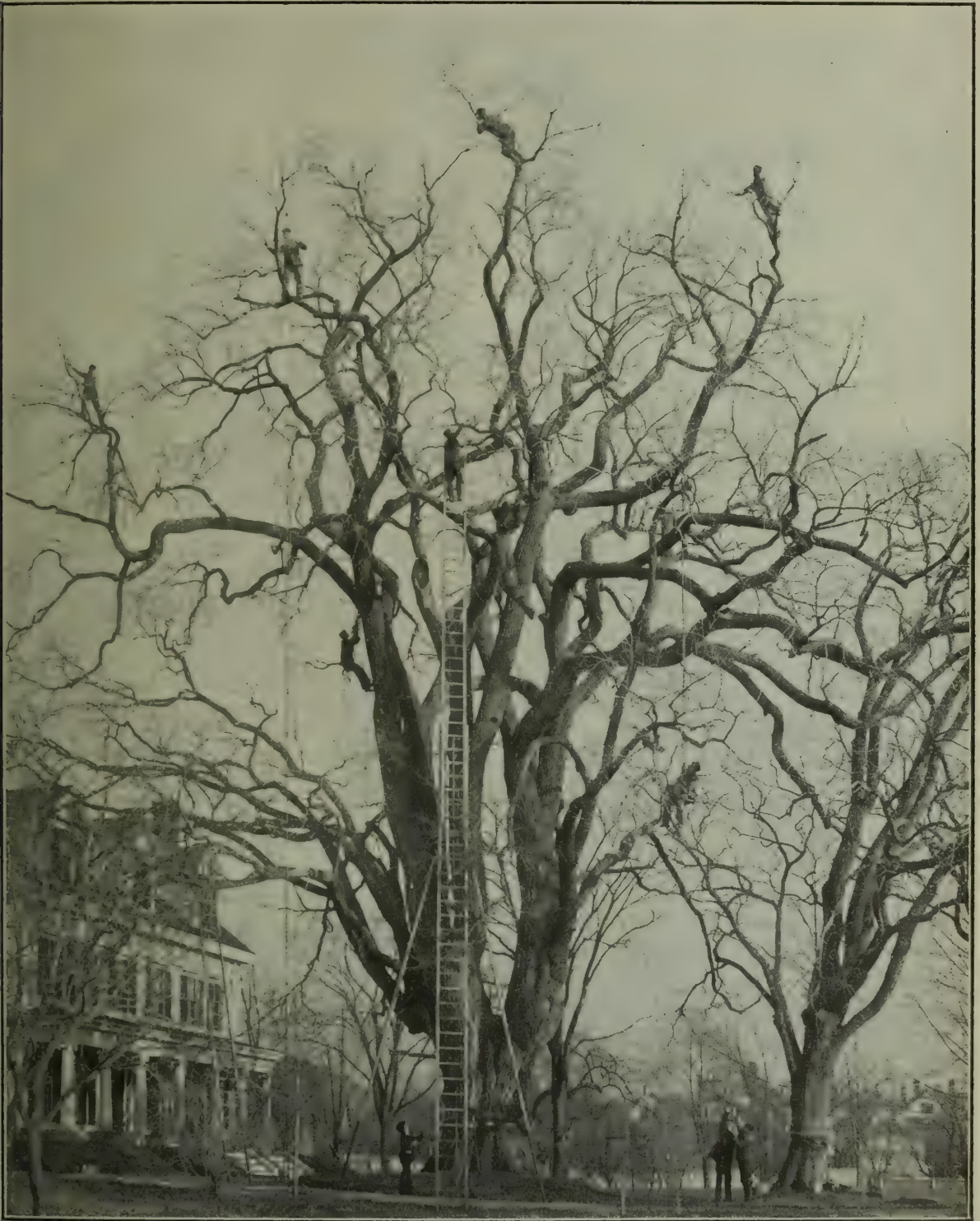
Georgetown, Mass., July 11, 1899.

opened a Pandora's box, whose inmates have not yet been entirely corraled. You will concede that the metaphor, though trite, is a good one; but that there is an

festes trees on teams and were disseminated over some 200 square miles. In 1888-89 the inhabitants of Medford and adjoining towns suddenly came to a real-

izing sense of the gypsy moth's power for harm. Shade trees, orchards and woodlands were defoliated, often in a night. The caterpillars swarmed along the fences

plies were polluted by the caterpillars, and the value of real estate in the infested district depreciated to a noticeable degree. Finding themselves unable to cope with the



EMPLOYEES OF THE MASSACHUSETTS BOARD OF AGRICULTURE DESTROYING THE GYPSY MOTH, ON THE DEXTER ELM.

At Malden, Mass., July 11, 1899.

and even into houses. People going to take the early trains were obliged to carry umbrellas to shield themselves from the multitudes of falling insects. Water sup-

pest, and learning its identity, the citizens of Medford appealed to the town for aid. At a special town meeting, held July 15, 1889, an appropriation of \$300 was made

for the protection of the city's shade trees against this insect. This sum was practically exhausted on two streets, with but slight effect in reducing the numbers of the moth. Next, the people of the infested district, embracing several cities and towns, appealed for aid to the Legislature of Massachusetts. This enlightened and progressive Commonwealth appropriated \$25,000, to be expended under the direction of a salaried commission, which made possible the destruction of the moth in the center of the infested region. This sum, however, being insufficient for the needs of the work, it was supplemented by an additional appropriation, and, with several changes in the management, the State work against this insect has been continued to the present time.

Early in the work the moth was found scattered over some 200 square miles of territory, and in the operations incident to the destruction of the eggs, caterpillars and moths, a force often numbering 500 men has been engaged. The methods chiefly in use consist of the destruction of the spongy egg masses by the application of crude creosote, the spraying of infested trees with arsenate of lead, the collection of the caterpillars by means of burlap bands, under which they are found and destroyed by employees, and the burning over of brush land and other infested areas where this method is applicable. A photograph accompanying this article shows gypsy moth employees at work destroying the eggs of the moth on the famous Dexter elm at Malden. This elm is the largest tree in the infested district—even in Eastern Massachusetts. It has an extreme height of 110 feet, and a circumference of 29 feet at the base.

Early in the work it seemed desirable to test the possibility of extermination by an application of the methods found to be effective to the most difficult problem available. The elm, badly infested, furnished the problem. The results were entirely satisfactory. Having cleared the moth from this tree, it was evident it could be cleared from any tree in the district—a conclusion amply borne out by subsequent experience. In the work of exterminating the gypsy moth the State of Massachusetts has expended more than \$1,000,000 of her public funds. This she has done primarily to protect her own agricultural interests; but, in so doing, she has given protection to similar interests in every State in the Union. Now that this work is drawing to a close, with the possibility of exterminating the moth amply demonstrated, it would seem that the State might with justice receive the financial assistance of the National Government in bringing this important work to a successful issue.

Our ornithologists have found in the rapid spread of the moth in Eastern Massachusetts another evidence of the great evil which accompanies the destruction of our native insectivorous birds or their replacement by the English sparrow. If the native birds had remained as abundant as they were 30 years ago the spread of the moth, no doubt, would have been appreciably restricted. While the elimination of the native birds in the residential districts has been largely caused by the sparrow, the efforts of this marauder have been ably seconded by thoughtless boys, so-called sportsmen, and particularly by ignorant foreigners. Thus the history of the gypsy moth appeals to tree-lovers and bird-lovers alike.



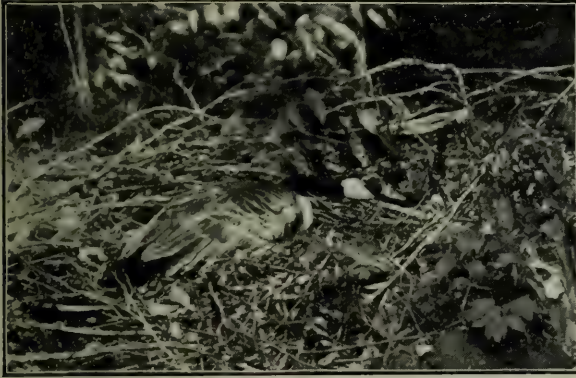
GUN PRESENTED TO THOMAS JEFFERSON BY THE EMPEROR OF MOROCCO.

Length of gun, 5 feet 6 inches. Silver inlaid with coral.

THE WILD GOOSE AS A DOMESTIC BIRD.

NORMAN POMEROY, JR.

The flight of wild geese, high overhead, on their migration from the North, and their hoarse, resounding "honk," is all most persons ever know of these great native wild fowl. Even sportsmen know comparatively little of their habits. Cir-



AMATEUR PHOTO BY NORMAN POMEROY, JR.

WILD GOOSE ON HER NEST.

grating and sociably alighted among the domesticated geese, following them into a pen, where they were secured and eventually tamed. Several generations of their domesticated geese, following them into a woods since then, but environment and association with mankind have not overcome their hereditary instincts. Their wings have been clipped to prevent their flying away, but though in a sense fully domesticated they continue to adhere to their native habits.

There are on record other cases of their domestication beside this one. It is said that fully 200 years ago wild geese were taken from their haunts in Canada, the country from which their scientific name is derived, *Bernicla canadensis*, to Great Britain, and there so domesticated that it is quite possible some of their descendants may to-day hide in thickets along secluded ponds. In the early days of the Hudson



AMATEUR PHOTO BY NORMAN POMEROY, JR.

A FAMILY AFFAIR.

cumstances, however, have afforded me unusual opportunities for becoming personally acquainted with them, and watching their nest building, the rearing of their young and their daily life to old age.

Some years ago a Michigan poultry farmer, one of my father's friends, while walking in the woods, by a rare chance discovered a wild goose nest. It was carefully hidden under leaves and sticks, after their usual custom, and had the proprietors been at home the intrusion would, no doubt, have been resented. But fortune favored the discoverer and the eggs were transferred to the care of a motherly fowl



AMATEUR PHOTO BY NORMAN POMEROY, JR.

WILD GOOSE NEST, UNCOVERED TO PHOTOGRAPH.

at the farm, the result being a fine flock of domesticated wild geese. The following spring my father obtained a pair of these birds, and the flock thus started was increased, one autumn day, by a company of their untamed kindred that were mi-

Bay Company the flesh of the wild goose formed a large part of the winter supply of food for the residents, being used both fresh and salted.

Our own flock of wild geese I can, of course, study at will, and so interesting have I found them that, making my camera supplement my pen, I have sought to show others some scenes in their life story. They are large, handsome birds, fully $3\frac{1}{2}$ feet from tip of bill to tip of tail, the neck being long and slender. Their colors are white, black and grayish brown. The birds mate in February and betake themselves to the woods at the earliest sign of spring in quest of a nesting place, usually selecting a little knoll surrounded by swampy ground, and laying 6 or 8 eggs. They conceal the nest with leaves and twigs so skillfully I have sometimes made several vain attempts before I succeeded in finding it, though almost its exact location was known to me. But woe to the



AMATEUR PHOTO BY NORMAN POMEROY, JR.

"SHE GAVE THE BIRD A VIGOROUS POKE."

luckless intruder, whether dog or man, who finds the owners of the nest on guard, for he will meet with a warm reception. The geese use their wings as weapons and can inflict heavy blows.

When walking in the woods with my camera one day I was surprised, on approaching one of these nests, to see a little girl of our neighborhood trotting up to it by another path. I had shown her the nest on a previous occasion, and she was informing the kitten, hugged in her arms, that she would show her "a nestful of lovely great eggs." She paused in disgust, however, on discovering that the lovely eggs were hidden by the wings of "Mother Goose." Seizing a stick, she gave the bird a vigorous poke. Madam Goose, accustomed to having her dignity properly respected, seemed too much amazed at this unceremonious treatment to take immediate action; but I had barely time for a snapshot with my camera when she flew to the attack, and I to the rescue, while pussy scampered up a tree.

Among the interesting characteristics of wild geese is their native delight in snow and cold. With an instinct derived from their ancestors in Northern wildernesses they prefer the top of a snow bank to the

shelter of the barn on a winter night, sitting on their bleak perch with breast to the wind, the head laid over on the back, and bill tucked under the wing.



AMATEUR PHOTO BY NORMAN POMEROY, JR.

IN CAMP FOR THE NIGHT.

When feeding, one of their number acts as sentinel, standing with head erect, ready to give a warning call at the approach of possible danger. Each has but one mate, and they are each capable of constant affection to each other, though they never become greatly attached to human beings.

As in the case of all creatures not many removes from wild life, the conflict between native instincts and civilized environment gives a double interest to the study of their habits.

TWO OF A KIND.

First Invalid—What's the matter with you?

Second Invalid—Ague. What's your trouble?

First Invalid—Same thing.

Second Invalid—Good. Let's shake for the drinks.—Chicago News.

THE FALLACIES OF CORMIER'S KIPPEWA.

W. A. W.

We were a party of 4, and one of 5 parties induced by Cormier to give up all other plans and prospects for our autumn hunting trip and to go after moose in a place he had discovered, on Kippewa lake, P. Q.

Every one in Canada seems to know Cormier, but no one seems to like him. We all have little cards which he gave us and on which is printed:

"N. E. Cormier, General Superintendent Forest Fire Rangers, District No. 2, Aylmer East, P. Q.

"Provincial Gamekeeper and Fishery Overseer. Hunting and Tourist Parties, for the Province of Quebec, Outfitted and Guided at Reasonable Rates. None but expert and reliable guides employed."

All this looked well, on paper, and he told us to "leave everything to him." We did, and, incidentally, left everything with him but our clothes, guns and a few valuables that we managed to secrete.

This is no "hard luck" story. We were all used to camping and roughing it, and were prepared to take things as they came, if they came honestly, without complaint. In fact, we did not expect great things; but we did expect to find something of all that had been promised for our benefit. We found none of it.

Cormier (who looks enough like Maurice Daly to make Daly hide himself, if he reads this) was introduced to us as a representative of the Canadian government, a prominent official. He was plausibly sincere and sincerely plausible. He represented to us that he had the power to arrange everything, and that he ran things generally, in the hunting line, all through the Province of Quebec, with a few other places thrown in; that, if requested, he could deliver to us—alive—a bull moose in 2 weeks, if we would give him 10 days to take us in and out of the woods. We could each select our own moose, kill it, and return in a calm, dignified and gentlemanly way to our homes. He would even allow us 2 bull moose each, and intimated that if we happened to get 3 each, or a caribou, for instance, and 2 moose, there would be a way to get the heads out of Canada. He was serious, confident and convincing.

Our railroad fare, to and from, would be so much; our licenses so much, and our guides, canoes and outfits so much. All we would have to do would be to bring our guns, ammunition and sleeping bags, and let him know when we were to reach Ottawa. He would have every-

thing arranged, would meet us and start us on.

The government wanted the people of the States to know something of the Canadian woods. It was a big country, and they were doing everything in their power to make it easy of access and to encourage people to come. Leave everything to him. We did.

There is not the slightest doubt that he had every latitude and indulgence in power. We realized this afterward when he calmly told us he had given special permits to some of the Standard Oil people, and others, to shoot on Kippewa in September—a month before the season opened—but more of this later.

We received our first shock when we learned that the railway fares were considerably more than he had represented. Unfortunately, the shock was not sufficient to keep us home. Our second one occurred when we lost Cormier in Ottawa, and found him, paralyzed with Scotch whisky, at 1 a. m., down by the station. After that the shocks came fast. We lost count of them. But to continue.

He met us at Ottawa and helped to make some purchases. He was evidently disappointed because we did not need more goods. Then we knew he was getting a rake-off. He issued our licenses and confidentially advised us to take out only 2 fishing licenses, for the 4 of us.

To be sure, the streams were full of trout, but we could only eat so many, etc. The cost of our fishing licenses was a gift to the Canadian government, or to Cormier. There probably never had been a trout in any of the streams where he sent us.

We managed to reach Kippewa, the railway terminus, after the usual delays and vexations, 43 hours from New York. There we were supposed to find our guides, canoes and camp equipments waiting for us. While we were changing our clothes Cormier was eating his dinner. When we got through he was gone! Then we began to realize what we were up against. Nothing had been prepared, nothing engaged. There were canoes, and tents, and camp outfits, and provisions to be selected and bought, if we wanted them, or we could wait a few days, when another train might come up, and we could go back home. We made the best of it and tried to get together the things we needed. The necessary delays incident to this kept us there over night, and we were finally dropped by Captain Latour.

after an all day trip in and out the many bays, late the following afternoon at Crooked creek, on Kippewa river.

The Latours, father and son, were from first to last courteous, honest and accommodating. This was so much the exception that it is worthy of mention. I believe these men can be fully relied on.

The guides we were obliged to take were, with one exception, not guides at all. They were doubtless good loggers and had been used to hunting moose in yards in winter, or perhaps to tracking in snow, but not on bare ground, and they admittedly knew nothing of that country.

For 3 days we hunted faithfully for signs of moose. We gave up fishing after once seeing the stream, and with the exception of some last summer's tracks, in mud bottoms of the ponds, we found nothing encouraging. Instead, we found that the many hunting parties Cormier had placed in the various bays on the lake were so near together that had there been any game it would have been frightened off. It would have been by merest accident if any of us had run across one.

On the third day, when guides and hunters were thoroughly disgusted, we sent big Louis English, a half-breed, whom Latour had sent down to us (for we had been obliged to start with 3 instead of the 4 men Cormier claimed to have engaged for us), back to Kippewa to get the boat and to take us anywhere from Crooked creek, but directly to the Turtle, whence we planned to go up the North river to Ostobonning. Thence we would go up Cherry creek, where Jean Bastian, our head guide, had been.

In our 2 days' waiting for the boat we hunted faithfully. Late one afternoon I ran across one of the 5 parties who had gone in with us. They were moving up farther North, on the installment plan, making camp each night. They had seen no game, and having come from Kansas City, on Cormier's representations, you may imagine the odor of brimstone about their camp. In fact, as far as I can learn, only one man in all the 5 hunting parties who went in on Kippewa with us succeeded in getting a moose, and this he ran across in the lake while on his way to camp one night. He deserves great credit, for he shot the moose after he had helped to paddle in a long chase, and made the shot at long range.

Finally, on October 6th, Captain Kelly came for us. He is another man who will treat you white, if you take chances on Kippewa. His remarks *in re* Cormier were forcible, hard-boiled, and characteristic, and we loved him for them. We had exhausted our stock.

Judging from the reports of Kelly and

others, that part of Kippewa is not and never has been a good moose country. From Kelly we learned how the "special permit" people had, in September, on other parts of the lakes, obtained a number of heads. One of the Standard Oil men had killed and taken out 4!

A good many heads had been shipped out of Kippewa before the season opened, and Cormier must have known of it, if he knows anything of moose hunting, which the natives all seem to doubt. This would have spoiled the October hunting, even if the game had ever been as plentiful as he represented.

From Captain Kelly's we went up through the North river to Hunter's point, and so on up the Ostobonning into a real moose country.

I spent 2 days with Jean, on a little chain of lakes just off Ostobonning, where the portages were all moose trails, and where, if one could spend the time, he would unquestionably find moose and bear. It was there, by the way, that Fred Irland photographed the cow moose and calf, shown in Scribner's for September, 1899. That story undoubtedly caused many people to go to that region last October. They, however, did not find the Indian summer at that time, as pictured by Irland. I had Billy, the boy mentioned in Irland's story, and on my asking him about the killing of the big bull moose, as described by Irland, he said: "Naw, man. He kill no buck, only 2 doe,* up where you come out." The rest of Irland's trip, Billy says, was about as stated.

It is only fair to say that after we had escaped from the locality where Cormier had consigned us and had made a 3 days' canoe trip farther North, we found some splendid moose country. True, we saw no live moose, but we found moose that more lucky hunters had killed, and abundant signs everywhere. Had we been directed there in the first place, or to some similar location, before we had wasted a week in futile wanderings, I am inclined to think we could have told a better story, but by the time we reached the real moose country our time was up.

Perhaps other men reached Ostobonning by a more direct route. Perhaps they had a stronger pull with Cormier. Perhaps we drew the wrong ticket and had no business there anyway; but the facts are as stated, and I earnestly advise all would-be Kippewains to get some other man than Cormier to salt them down.

At Buell's depot, head of Ostobonning, we found a Mr. Leary, the silver lining to the whole Canadian cloud. A more

*Meaning cow moose.

genial, hospitable and kindly man I never met. If I ever go back to that region it will be to see him and tell him so. Here's to him!

Blackman had a little experience with his guide which illustrates his ability as a woodsman, one of the "expert and reliable" kind. Bill, the guide, had been directed by some loggers on the lake to a cranberry swamp, where some moose had been seen. He led Blackman around for a time until he was tired of it, when, after inquiring the direction from the guide, Blackman turned him around and with a few appropriate remarks showed him the way out.

It was with such men and in such country that Cormier knowingly or ignorantly left us—either way culpably.

When we reached Kippewa, on our return, we were amused to find that Cormier had sent a separate bill to each of the 5 parties for his entire personal and traveling expenses from Ottawa and return. Comment is unnecessary.

A word about the difficulty of getting trophies out of Canada. Their system, as practiced now, makes it extremely doubtful whether a man can save a specimen once he secures it. To illustrate: I bought, on Ostobonning, a pair of antlers of a bull killed in the previous November, and with them, shipped to New York from Mattawa some grouse I had killed for mounting. I complied with all the requirements in shipping them, at Mattawa, and a week later my taxidermist in New York received word from Montreal that the agent could not ship package until he was in receipt of my hunting license, which had already been copied, and a copy sent with the package from Mattawa. The horns were declared as being a year old, and all the license requirements were obviously a farce. Of course the birds were ruined.

A friend of Beekens, who was fortunate enough to kill a moose in New Brunswick, lost the head by the same stupid delays and red tape. When he finally received it it was spoiled for mounting.

When I was declaring the horns at Mat-

tawa, the magistrate, before whom I made oath, denounced Cormier roundly, as did every one, when we were coming out. In expressing his sympathy for our disappointment he offered, for a consideration, to let us go into the National park, near Mattawa, and kill moose. He admitted this had been done before.



WHAT SLOCUM ESCAPED.

There is a chance for any one who cares to obtain his game in that way.

Cormier tells us he is advertising the country by bringing people there in this way. I believe him, and I shall try to assist him in every way possible. Any reader may draw his own conclusions; but it looks as though these people were anxious to entice you there for all they can get out of it, but are careful to put you where you can't get anything out of it.

The last night on Cherry creek, Slocum and I, in pitching our tent, stumbled on a cross which marks the grave of a man who had been drowned near there. As he sat musing by the fire Slocum said:

"Doctor, if there is a ray of sunlight in the morning I wish you would photograph that moose hunter's grave. I should like to show my friends what I have escaped." It rained heavily in the morning, as usual; but an exposure of 8 seconds gave a fairly good picture, which I enclose. This grave and Cormier were the 2 most interesting and depressing objects we saw on the trip.



"HURT UNTO DEATH."

LIARD RIVER INDIANS.

A. J. STONE.

From the Kaskas to the vicinity of Hell's Gate we find no Indian tribes near the river. At the latter point are the Etcho-tas and Ta-kullas, who hunt the country from Devil's Portage, 40 miles above, to the mouth of the Nelson, 60 miles below, from the Beaver on the North to the Nelson on the South. On their annual visit to the trading post 110 miles above Hell's Gate they hunt the entire distance going and returning. Only 2 or 3 remain permanently near the post.

Of all the native tribes of Northern America whom I have met these Indians are the worst. I speak advisedly, for I know them well. I was practically a prisoner among them 30 days, alone except for my faithful dog Zilla. The post trader assured me he would be afraid to be alone when they came in, and the trader is usually a potent personage among Indians.

I have made every possible effort to trace the origin and history of these 2 tribes, and am forced to the conclusion that they are renegades and desperadoes, who, to avoid the punishment due for crimes committed elsewhere, have fled to this distant wilderness for refuge; that they belong to the tribes North and South from their present home, and that these bands were never larger than now. Even now any one of them will murder another with as little compunction and for as little cause as he would kill a wolf.

With the melting of the snows in spring they leave the main river and ascend the tributaries on either side to their heads, trapping for beaver. Thence working their way overland, they reach the lower post at the mouth of Black river about the first week of July. After a week or 2 spent in trading and feasting they travel down the river as far as Devil's Portage, whence they scatter through the mountains to their respective hunting grounds. During August, September and October they revel in fatness, for moose, caribou and sheep abound. Men, women, children and dogs grow fat, never giving a thought to the approach of winter, when famine will stare them in the face. Improvidence is an ineradicable trait of their character.

Let me illustrate: Enough game has been killed by the hunters to last the camp a year if cared for, but indolence or thoughtlessness waste it. Two or 3 fat sheep have been left 5 or 6 miles up in the mountains, covered only with snow. Caribou have been cached on the bald ridges or in the willows, protected only by the

skins thrown loosely over them. Moose were hung up in the timber below.

Snow has piled up in the mountains and the last morsel of meat in the camp has been devoured. The men drowse around the fires and the women, bearing their papooses on their backs, are sent to the caches for a new supply of food. They go first to where the sheep were left, but to their great surprise they find that the wolverine has anticipated them. The journey is extended to the knobs for the caribou, but wolves have held high carnival there, and the last shred is gone. Long after nightfall the weary squaws, bearing their hungry, half-frozen babies, come into camp empty handed. Next day the women go again on their dreary quest, finding at last a portion of the moose meat. They first satisfy their own hunger, and then bear the remainder to camp, where their lords regale themselves on this supply.

Meanwhile, during the second day's tramp of the women, the men have visited their traps only to find them empty, of course, for the foxes which they were intended to catch have participated in the feasts from the looted caches, and so despise the lure. As winter closes in, the means of living are rapidly narrowed down; the caribou crosses the mountains, the moose descends to lower levels, the hibernating animals have retired from business, and only an occasional lynx, rabbit or bird can be caught. The daylight fades into the long sub-arctic night, the temperature falls lower and lower, and so with Hunger and Cold and Dark for companions the miserable savages settle into the long, desperate wait for spring, with Chance as a possible friend and Death a probable visitor. Such attention as their traps receive during this dreadful season the women must bestow, while the men lie by the fire and sleep.

To illustrate the callousness of Indian selfishness let the following incident serve: A young man took a wife (a "woman" they call her) and wandered off with her 30 miles from any camp. When famine overtook them the man, alarmed for his own safety, and finding his wife in no condition to bear the fatigue and privation of a journey, coolly shot her and joined his companions at the camp unquestioned.

During my stay on the Liard last winter a starving Indian from one of these bands deserted a sick wife high up in the mountains, leaving her without food or fuel—a dinner for wolves! Nine other

deaths of similar character occurred, of which the trader informed me. Coming down the Liard with Mr. Simpson late in the fall, in a large boat, it became necessary to unload and carry around Cranberry rapids. We found ourselves compelled to spend one night at the portage with our job unfinished. As we ate our suppers under the shelter of our canvas we were visited by an Indian named Iron and a boy. Iron came into the shelter and accepted a bountiful share of our supper, but the boy, a miserable object, apparently of 12 or 14 years, remained outside exposed in his few filthy rags to the fury of the raging storm. I asked Mr. Simpson why the boy did not come in, and was informed that he was an orphan! This condition, which would have appealed to a civilized heart at once, only made him a friendless slave to an Indian!

We stacked his plate high with some of everything we had and watched him stow it away, glad we could show him the sunny side of a human heart for once. His subsequent history was brief and sad. He was taken into the woods on a hunt by his master, Iron, and an Indian doctor named Powder, and when they returned the boy was not with them. Such boys are often accused of witchcraft and put to death. This was the fate of the boy we fed, as I was afterward informed by the Hudson Bay Company's trader, who, while admitting it, justified his silent acquiescence by saying that interference would have jeopardized his own life.

Various methods are employed in such executions. In summer the victims are bound naked to a tree in a swamp and left to be stung to death by insects. In winter they are bound and left to freeze, or to be devoured by wild animals; or they are killed and sunk through a hole in the ice into a lake or river. The religious world spends money liberally in the effort to reclaim Darkest Africa. I trust the appearance of this brief incident in the count of this incident in *RECREATION* may suggest to them the duty that lies at our very door.

Passing on down the river we found the last tribe actually occupying its banks to be the Cho-tinas, a tribe much reduced in numbers. They have long been under the

control of the Hudson Bay Company, and if they ever possessed such malignant natures as I have just described they have lost them. They are harmless, though insufferably lazy. Murder is to them a crime unknown. They occupy the country along the river from the mouth of the Nelson to the mouth of the Nahanna, about 100 miles below Fort Liard. From there to the Mackenzie, perhaps 120 miles, the country is divided among tribes who trade at Fort Simpson—the Tko-ga-ho-ti-nas, the Et-tcho-tas, and Ta-kul-las at Hell's Gate, the Spa-to-ti-nas of Beaver river, the mountain Indians farther back, called His-to-ti-nas, and the Tsa-lvo-nas of the Upper Nelson, all of whom trade more or less at the fort at the mouth of Black river on the Liard. They are unexcelled as moose hunters, and procure many valuable furs, marketing probably as many dressed moose hides as any tribe in the North.

Considerations of personal safety prevented me from measuring or photographing any of them, as the act would have excited their distrust at once. A young hunter was fast dying with consumption while I was among them, and had I attempted any such work his condition would have been attributed to my magic and I should have been murdered. My knowledge of their superstitions was my safeguard.

The chief and most valuable furs gathered by these people are beaver and marten. Few foxes are taken, especially cross and black. The Chotinas farther down are in a good moose country, but, as a consequence, find few furs; hence they are miserably poor, and are incorrigible thieves' perforce.

While these tribes have words common to all, they yet differ widely in their language. Notwithstanding this difference, they manage to converse from tribe to tribe through the medium of this limited common stock. To illustrate: Beo-cho means Big-knife, and is used by all the tribes. Sus, meaning bear with the Tahl-tans, or Kaskas, is here changed to Suh. This will serve to show how the word may be recognized by one of the parent tribe in its new garb. In many words, however, the change is entire, and the word would be unrecognizable.

Sunday School Teacher (in Chicago)—
Why did the wise men come from the East?

Scholar—Because they were wise men.—
Philadelphia Record.



AMATEUR PHOTO BY J. R. PETERSON

HE WHO EXPECTS EVERYTHING SHALL NOT BE DISAPPOINTED.
Winner of 34th prize in RECREATION'S 4th Annual Photo Competition.



AMATEUR PHOTO BY H. T. WHITMORE.

THE TURTLE TRAPPERS.
Winner of 40th prize in RECREATION'S 4th Annual Photo Competition. Korona Long Focus Camera

DOUGLAS' SQUIRREL. *SCIURUS HUDSONIUS DOUGLASHII*.

ALLAN BROOKS.

This is the most richly colored squirrel of the *hudsonius*, or chickaree, group, of which the common red squirrel of North-east America is the type. Douglas' squirrel inhabits the humid, heavily timbered country West of the Cascade range in British Columbia and Northern Washing-

ton, but is replaced by a much lighter and less richly colored form on Vancouver's island. brown above, tinged with gray in winter, with the lower surface always ochre yellow, varying in intensity in individuals. Males are generally more brightly colored than females.

The notes are quite distinct from those of the red squirrel except perhaps the trill-



DOUGLAS' SQUIRREL. *SCIURUS DOUGLASHII*.

ton, but is replaced by a much lighter and less richly colored form on Vancouver's island.

In size Douglas' squirrel averages about the same as the Eastern form found in Ontario, but in typical examples the coloration is very different, being dark umber

ing chatter, which is the same in both. Douglas' squirrel has a very musical chirp, or rather a soft chirping whistle.

I have never noticed it robbing the nests of small birds, but it is certainly fond of meat, as every trapper knows.

SPREADING HAPPINESS.

"I have but one rule that I follow absolutely in this life, and that is to make other people as happy as possible."

"Well," she replied, "you ought to be gratified, then, at what I heard a young lady say the other day."

"What was that?"

"She said that whenever she saw you dancing she had to laugh."—Chicago Times-Herald.

HARD LINES AT KITCHAWAN.

G. A. MACK.

Away up in the Northeastern part of Westchester county, New York, 10 miles from a railroad, there lies, beneath a blanket of miasmatic fog, a sheet of water known indifferently as Cross pond or Kitchawan lake. Tradition derives the latter name from a tribe of Indians erstwhile dwelling on its malarious banks. The gentle aborigines were unacquainted with the specific properties of quinine, and a thousand moons have waxed and waned since the spirit of the last Kitchawan shook loose from its fevered tenement and sought a drier if not more salubrious clime. A less poetic legend attributes the christening of the lake to the first Hibernian who tried to lure fish from its turbid waters and failed to "kitch a wan."

The lake is about 2 miles in circumference and of great depth; the water being in some places almost 6 feet deep and the mud from 8 to 80. There are spots where a man can reach the shore dryfooted—by using stilts. At all other points the surrounding swamp is impassable. The water is full of pickerel grass and much of it covered with pond lilies, on whose fronds gigantic frogs blink meditatively. Great snapping turtles bask on partially submerged stumps, water snakes ply to and fro, while lesser aquatic beasts of various degrees of ugliness wiggle in schools from shoal to shallow. An occasional blue heron stands sentry over the watery desolation, hell-divers rush aimlessly over its surface like avian tugboats looking for a tow, and shore birds teeter languidly wherever they can find sufficiently solid footing. Kitchawan is a modest tributary to the Croton watershed, and when its quota reaches the city it furnishes steady occupation to the Registrar of Mortuary Statistics.

I was beguiled to this delectable region by the assurance that it afforded an ideal camping ground. Always ready to share my joys and their attendant expense I took with me 2 friends and my son. On a scorching August day we reached the station nearest our destination and hired a team to carry our impedimenta. There was no room on the wagon for us, and we started jauntily to walk 10 miles. I do not know how many hills we crossed. I think we counted 27 before we became delirious. However, we struggled on and came at last to the lake. It looked promising. The fog had taken a day off, the pond lilies were in bloom and their fragrance masked the odor of decaying vegetation. All over the open water were widening, circular ripples made, we fondly imagined, by pickerel if not by bass. Heat and fatigue were forgotten. We got the tent up, made all snug and went fishing. We had chartered a boat for our stay, but now discovered that on Kitchawan boats

are kept locked up and whoever wants one must bail it out. So the boy was sent back a mile to the farm house for the key and the bailer. We fished 3 hours and disgraced an aforetime respectable rod by catching with it a 2 ounce clouser. Then darkness and the fog came together and as we reached camp it began to rain. We had no floor cloth and had forgotten to dig a trench around the tent. So we spent the night listening to the merry gurgle of brooklets through our blankets.

The rain continued all next day. We fished in the morning and by our combined efforts captured an infant catfish. The afternoon we spent in wandering disconsolately about the country, interviewing the natives. One and all praised their pond. "Yes, Sir," they said, "its ther best fishin' lake in the county. Thers pickerel in it bigs yer arm an' perch ut 'ill weigh more'en a pound."

On the subject of bait they differed. "Whatcher try 'em on?" one inquired. "Minners? Huh! minners is no good; try 'em on frogs an' yer'll ketch 'em sure."

The next native sniffed scornfully at mention of frogs. "Frogs is no good; try 'em on a gob of worms."

The next advised the use of dobsons, and so on. We tried every procurable kind of bait, and did not catch fish enough to feed a cat. Then condolences were in order. Our advisers would visit the camp at night and mourn with us. "Shaw!" they would say, "its tew bad yer can't ketch no fish. Fishin' was fine last week and 'll be good agin' arter a change o' moon. Be yer sure yer know how to fish?"

This was too much, and we retired forthwith from piscatorial pursuits. Thereafter, when a fishless fisherman landed at the camp to ask questions, we retailed chestnuts. "Oh, yes;" we would chant in chorus, "best fishin' lake in the county; pickerel bigs yer arm and perch 'ut weigh a pound. Try 'em last week on anything yer haven't got and yer'll ketch 'em sure."

Despite their insane delusions regarding the fishing in Kitchawan, the natives of the region are an amiable and obliging lot. A little behind the age in some respects, perhaps, but well up in current prices and the value of money. Their instant knowledge of any fluctuation in the price of country produce was amazing. Each farmer seemed to have a direct wire to the Exchange. There was a booming bull market right through our stay. Every time we wanted eggs we learned the price had advanced 2 cents a dozen over night. Butter rose steadily from 22 to 30 cents. Garden stuff was firm and in great demand, though little was taken owing to moonlight nights. Green field

corn, weak; no buyers. Milk firm at 5 cents until we learned to rope a cow.

About this time occurred a frenzied flurry in the poultry market. We had been shooting woodchucks a mile or so back of the lake. Soon after our return an aged granger appeared.

"Which of you fellers has been shootin'?" he queried.

"All of us," I answered.

"Then you are the fellers what shot my duck."

"Nonsense!" we replied, "We are gentlemen sportsmen and would scorn to shoot your duck. Where was it shot?"

"Right in my yard, up on Salem road."

"Now look here, my senile friend;" I said severely, "we have not fired a shot within a mile of your place. You will have to find another market."

"Dunno 'bout findin' a market," said the old fellow, "but I can durn easy find a constable. You can pay 75 cents for my duck or be took before the Squire."

We remembered the disquieting text: "We were strangers and ye took us in." Besides, we had no money to waste in subsidizing the judiciary, and the Squire was likely enough cousin to our accuser or at least to owe him a barrel of cider. We paid the bill and the old man left us. Before he was out of hearing the boy called after him, "Hey! Where is our duck?" "Over at the house; you can get it but taint worth while." The boy trudged off, and presently returned with a gosling which was flapping its pinfeathered wings and squawling dismally. We examined our purchase. It weighed about 3 ounces. On its head were a few drops of blood. Behind each ear was a small wound, and by lifting the skin from the skull we could pass a straw into one opening and out the other. Without trying to rival the perspicacity of Sherlock Holmes, I venture the assertion that a small skewer would make just such a wound.

The following day we went to the farmhouse to ask how high provisions had soared. As we turned the corner of the barn we ran against our duck seller in time to hear him say, "Now 3 more are gone." We were palsied with apprehension.

"Three what?" I cried, huskily.

"Ducks?"

"Naw," he said; "calves."

This was awful! I steadied myself against the barn and strove to speak boldly. "Are they big enough for bob veal?" I inquired, witheringly, "Produce their shot perforated carcasses and put a price on them."

The old man grinned. "Oh, they aint been shot," he said, "they've ony strayed. How did you like your duck?"

A few days later we returned from a tramp and caught an emaciated cur eating our last ham. There being no one in sight, we endowed ourselves with the right of high justice and visited condign punishment on the despoiler. We were hungry and decided to postpone the obsequies until after supper. So we threw the deceased into the bushes behind the tent, and attended to the wants of the living. While eating we had another call; this time from a tall, burly man with a bad eye. He said he had lost a dog, best bird dog in the county; wouldn't take \$25 for him. We had seen no such animal, and swore to the fact with an earnestness and unanimity that at length convinced our caller. He wandered around the tent awhile, getting dangerously near the bushes, and then departed whistling and calling "Tige! Tige!"

It was very sad, and we will hereafter bury our dead before partaking of the funeral baked meats. We did the most charitable thing we could think of under the distressing circumstances—sank the defunct, with a stone tied to his neck, near an eel pot belonging to his bereaved master. I trust that gentleman has before this received some return from his dog in eels.

At the end of 2 weeks our commissary department collapsed. We could not catch any fish, and the neighboring farmers had our money as well as all their edible crops under lock and key. We did not care to risk burglary so decided to return home, and did so by giving our joint note for the cartage.

I can heartily recommend the region to anyone who thinks he is having hard luck now. He will be convinced to the contrary when he gets there. As soon as I can sell a descriptive article to *RECREATION*, I am going back to try the shooting. There will be considerable of it done, I fancy, when the natives hear I have arrived.

WHEN THE FROST COMES OUT THE GUMBO.

STANLEY SNOW.

When the frost is on the punkin
An' the fodder's in the shock,
A farmer out in gumbo land
Ken market grain an' stock;
But when it gets near Easter time,
The frost comes out the ground
An' eggs an' stuff just have to keep,
Till paw ken get to town;

An' children comin' home from school
Must wait outside the door,
Till maw inspects their shoes for fear,
They muss the kitchen floor;
But were it not for gumbo land,
An' Rubes an' hogs an' corn,
Our golden West would be a frost,
As sure as you were born.



AMATEUR PHOTO BY E. R. ZALINSKI.

AT CLOSE RANGE.

Winner of 41st prize in RECREATION'S 4th Annual Photo Competition. Eastman Folding Kodak.

OPTIMISM.

A. L. Vermilya.

If the soft light fails upon the fairest day
And cold rain falls from skies of ashen
gray,

Do not from your gladness part;
Labor on with cheerful heart;
For the sun will shine again another day.

If you're fishing on the bay where sea-
mews soar

And you row your boat across from shore
to shore,

Getting not a single bite
On the left or on the right,
Try another kind of bait and fish some
more.

If you rest to watch the golden sunset's
gleam,

Rocking, gently rocking, while you muse
and dream,

Till you're drifting slowly back
O'er the hard-won, weary track,
Grasp again your oars and pull against the
stream.

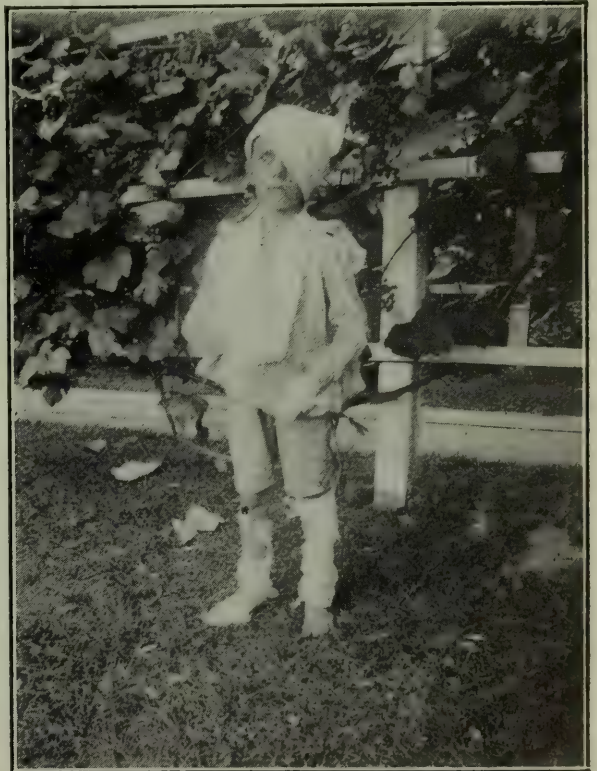
When fair summer with her train has
glided past,

And you shiver in the winter's chilly blast,
Look beyond the ice and snow;

Think of lands where roses blow,
And bright, sunny skies o'er all a lustre
cast.



MORNING.

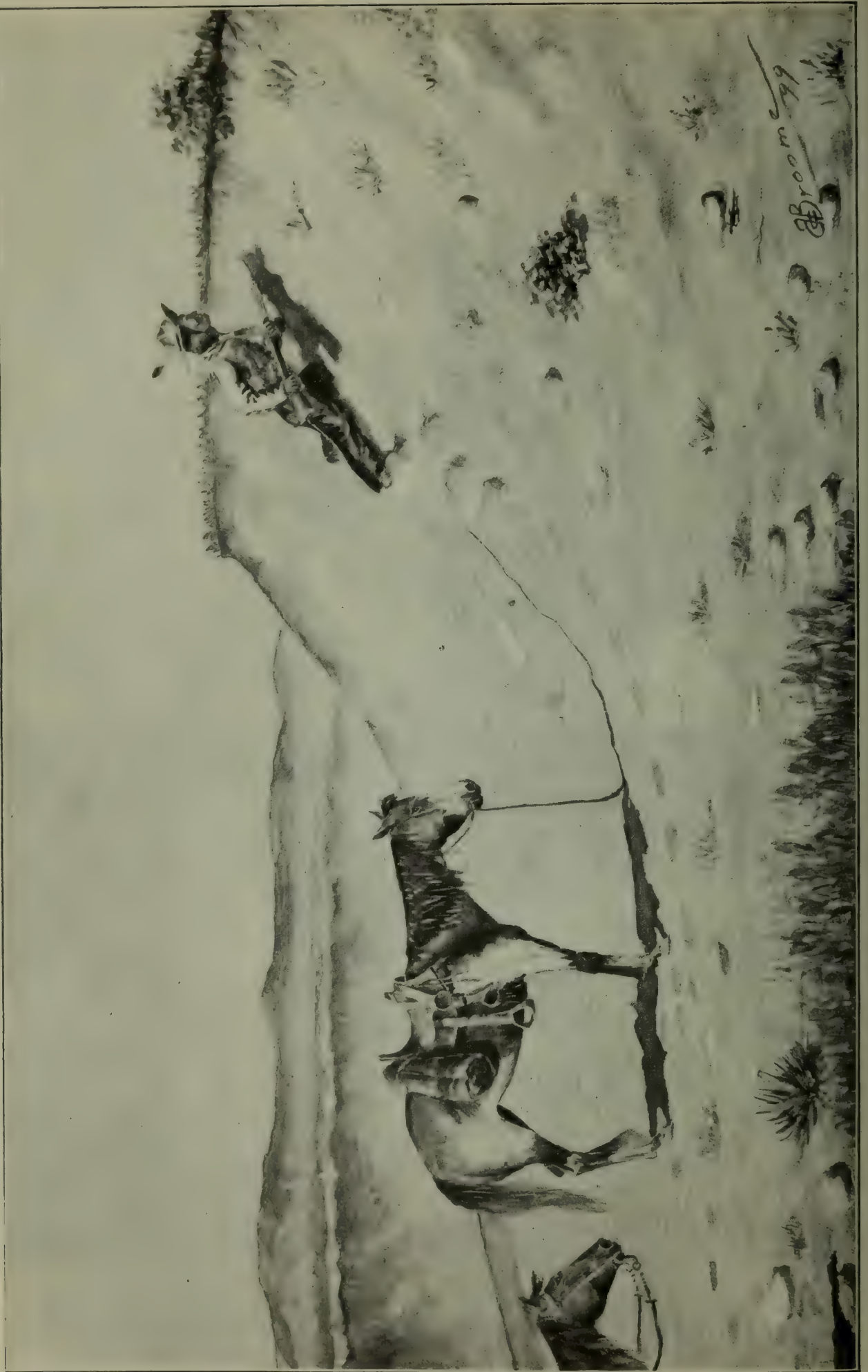


AMATEUR PHOTOS BY MRS. F. I. RUHL.

EVENING.

THE GLORIOUS FOURTH.

Winners of 42nd prize in RECREATION'S 4th Annual Photo Competition. Bausch & Lomb Single Achromatic Lens.



THE ANTELOPE HUNTER.

HUNTING THE BLUE GROUSE WITH REVOLVER.

L. C. BURNETT, JR.

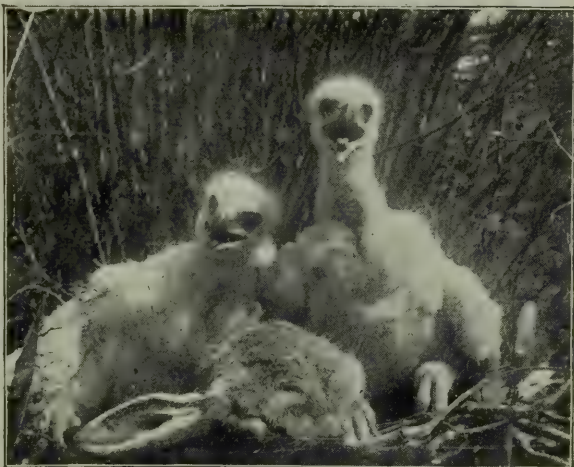
Have you ever hunted the blue grouse? If not, you have missed the best part of life, and have yet to bag the noblest bird of the mountains. Imagine yourself under the pines, on some glorious September morn, when the air is laden with resinous fragrance. Down, down, 3,000 feet below, between great, gray canyon walls, you see the river churned and dashed into spray. Up, up, still higher, where earth and heaven seem to meet, are snow capped peaks glistening in the sunshine. But, hark! what is that? "Ku-boom! ku-boom!" How the blood goes bounding through the veins as the revolver is unconsciously gripped. A few steps forward, and there is a blue grouse in all his glory, walking boldly on an old log, head low and tail spread out in grand array. What a picture he makes; it seems a pity to murder him, but the revolver has already settled to its proper place, a sharp report, and you stand above the woodland king.

I will never forget one trip I took in company with a friend. It was in the early fall of '96 that we left Laramie, Wyo., with a light outfit, for Centennial valley, lying 50 miles Southwest, near the Colorado line. All day we rode over a rolling country, through prairie-dog towns, over alkali; now and then jumping some lazy jack from under the sage brush. Evening overtook us in the foothills and we camped for the night.

Sunrise next morning found us on the go. By noon we reached the Buckeye and followed it up to Grand canyon, where we made our permanent camp. An ideal spot it was; wood in abundance 10 feet from the tent, water fresh from the mountain side, and excellent grazing for the horses. While I was getting supper, H. took his rod and went down the stream, returning in a few minutes with a mess of trout.

That evening H. told me one of his former experiences. A few years previous he was with a round-up gang in Montana. In the party was a young fellow by the name of Bader, fresh from Ohio. He was not particularly timid, but had an awful dread of coyotes. Their wail was misery to his soul. One night, after trying several hours to sleep, he at last dozed off. All of a sudden the most unearthly yelps came from the direction of the mess wagon, sounding as though pandemonium had been turned loose. With a whoop Bader jumped from under the tarpaulin and emptied his 6-shooter in the direction of the frightful noise. Next morning they found 2 holes in the frying pan, while the coffee boiler was a complete wreck.

Morning dawned clear and crisp, just the day for a trip into the pines. H. took his camera and started up the canyon, while I bent my steps toward a heavily timbered ridge where I felt certain of finding my favorite game. A long, hard climb, then pushing through some small firs, I stood in the forest primeval. In a few minutes "Ku-boom, ku-boom" sounded close at hand. I looked around, but could not locate the bird until another note came from an old dead pine to my right. There he was, monopolizing the greater part of a limb, walking and strutting back and forth, every few moments stopping to eye me inquiringly. On one of those occasions I could not resist the temptation of taking a shot. Down he came with a thud,



AMATEUR PHOTO BY L. C. BURNETT, JR.

GOLDEN EAGLES.

and my first grouse of the season was bagged. Under a large spruce I saw a hen feeding. On my approach she took to the lower limbs, offering a capital chance, and I dropped her with a shot through the neck. Depending on one small bullet from a revolver gives one far greater satisfaction than using a rifle or that terrible weapon of extermination—a shot gun.

Following on around the ridge, I came to a great rock jutting from the mountain side, and climbed to the top in order to obtain a better view of the canyon. On looking down I saw at least 20 birds feeding under some small firs, not 100 yards below. Hurrying around, I reached the place, but there was not a bird in sight. I searched everywhere, and was on the point of leaving when noticing a peculiar looking bunch in a tree to the left I walked closer and could see the outlines of a bird. A hasty shot, a clean miss, and away

he went with a mighty roar and was lost to view down the canyon. Half an hour later I found the rest of the bunch and killed 6 more. Then taking a new route I started for camp. At an opening in the timber a large cock flew up and lit on a boulder on the other side. It was a long distance, but he sat perfectly motionless, so I let drive, and, to my astonishment, over he rolled. It was 95 yards to where he lay, and the ball had broken his neck. That was the best shot I ever made.

But good fortune did not end at this. Leaving the ridge I heard a peculiar screaming coming from toward the river.

Following in that direction I came to the base of a huge dead pine, blackened by forest fires and almost bare of branches. Near the top was a large nest, and 2 queer looking heads peeping over the side. It was a long, hard climb, but at last the nest was reached, and there I found my first golden eagles. They were as big as quails, but still in the down. By the aid of a fish line I was able to get the young desperadoes to the ground, but not until my hands looked as though they had gone through a skinning process. I made some good photos of them and send you a print herewith.



C. C. CAWSEY.

H. C. BROMLEY.

A. E. GREENUS.

A BUNCH OF SEATTLE SWINE.

A subscriber in Seattle, who sends me a copy of this picture, writes:

"Both Bromley and Greenus, particularly the latter, deserve the strongest censure for their actions. Greenus is a notorious

violinist of the game laws, and I have more than once heard of similar acts on his part.

"A good strong 'roast' would strike a responsive chord in the better class of sportsmen in this city, where such acts of butchery are all too frequent."

THE PASSING OF THE WILD FOWL.

A. S. DOANE.

I came to Currituck county, North Carolina, 6 years ago, because I had been told it was the best shooting ground for wild fowl in North America.

When I came I found that so far as law was concerned it was one of the richest counties in the whole world. The wild fowl were in greater numbers than I had ever dreamed of. When we entered Currituck sound, on the old steamer "Comet," the rafts of swan looked like great snow-drifts. The air was alive with geese and ducks, and the steady shooting from the batteries and bush blinds put one in mind of the 4th of July in New York city.

On investigation I found that all desirable marshes were owned by clubs, which maintained guards to protect them against trespassers, and that no non-resident could shoot afloat—*i. e.*, in a battery or bush blind. It took a year to become a legal resident, and all I could do in the meantime was to look on.

We have 2 close days in each week, *i. e.*, no shooting on Wednesdays or Saturdays. We also have a law against fire lighting, and all other ways of killing ducks, except by shooting from the shoulder.

When I questioned the oldest inhabitants they told me there were not 10 per cent. of the fowl that there were in former years. I put these down as fairy tales. Now I find it is true. In '94 there were 6 clubs here, at all of which the attendance was regular and the shooting good.

These were the Swan Island, the Light House, the Monkey Island, the Narrows Island, the Currituck Shooting and the Palmer's Island clubs. There may have been more, but I was not so well posted then as now. Battery shooters were making \$500 to \$1,000 a season, and bush blind shooters in proportion.

During the snipe season bags of 50 to 100 in a day were not uncommon. In the beach bird season any man who could fire a gun could kill all he wanted of these, even if he should want a thousand. Now it is different.

We don't see quite so many swans. A bunch of 50 to 100 does my eyes good. I saw more ducks the day I came into Currituck sound than I have seen this whole season.

Last spring if a man killed 20 snipe he was doing well, and the biggest kill I

heard of was 41 in a day. At the close of the beach bird season if a man could average 30 birds in a day he was in great luck.

At present the only clubs that have any shooting worth mentioning are the Swan Island and the Currituck. There is a little shooting at the Narrows Island Club, but no members come to either the Light House or the Monkey Island Club. The Palmer's Island Club has sold its property and gone out of business. I have heard that some of the other clubs will do likewise as soon as they can find buyers.

Battery shooters and bush blinders are not making wages this year, save in exceptional cases. What is the cause of all this change in 6 years?

It is simply that wild fowl are worth money. This is the same cause that exterminated the buffalo, and nearly all our fur-bearing animals.

Just as long as we have a market for game the game will go to that market; and just as long as one duck worth 10 cents exists some one will be after him, trying to pull in the coin.

Outside of the club owners and their guests we have between 400 and 500 market shooters in Currituck sound. There is nothing illegal nor disgraceful in being a market shooter, and it is the hardest kind of work. In fact, take them as a class, I know of no harder working nor more accommodating men than those who shoot in this sound.

In spite of the decrease in the number of water fowl, a prominent buyer told me he was buying about as many as usual. This means, I presume, 40,000 birds, and there are 3 or 4 buyers. Prices are low this year. So you see that, although birds are scarce and growing more so, the gunners work even harder to meet the demand.

As to beach birds, last year was the first time any money value was put on them. As soon as it was discovered they could be sold a small army of shooters lined up on the beach.

These birds are not wanted to eat, but for their skins. I am informed that 60,000 skins, of all kinds of beach birds, left this county last summer. Where, heretofore, a man who wanted a day's sport, would go over once in a while and kill 100 or 200 for himself and his neighbors, every boy who can hold a gun now shoots from early

morning until sunset. The prices were 3 cents each for small birds, 8 cents for the larger kinds, and 10 cents for gulls and herons. Nobody gets rich, but the birds are vanishing. Unless we can find some way to take the money value from birds 5 years more will finish them, no matter where they are or how numerous now.

The only reason the Swan Island and Currituck Shooting clubs have been able to hold on is because their marshes are so well situated, and because they spend an almost unlimited amount for law and guards.

Their marshes being well protected, when the fowl are driven out of the sound they take refuge there. If the slaughter continues as now these 2 clubs will soon have a monopoly of what little shooting will be left.

The people who buy and use the game and feathers are really responsible for the destruction of the birds. If there were no price on ducks there would be as many

here now as 10 years ago, when a pound of powder kept a family in food all winter. We cannot have a game and feather market and have the birds, too. If we keep the market now, we shall soon have to give up both; but if we give up the market at once, we may keep our birds for many years yet.

The whole question rests with the consumers. If no one ate game, except what he killed, the market would disappear, the birds would be plentiful, and a man could have a decent day's sport whenever he wanted it.

Laws are no good here, as far as real game protection goes. We have enough laws in this county to protect all the game in the world, but just as long as birds and feathers sell just so long will the extermination go on.

I repeat, there is but one way to protect the birds—don't buy game and don't wear feathers.

SPARE THE MINSTRELS.

A. L. VERMILYA.

Women of America, in the name of all that is good, and happy, and bright, and cheerful, do not longer decorate your hats with birds. Cease to follow this cruel mandate of fashion, ere the last songster has, at your behest, been slain!

Are worms, beetles and caterpillars more pleasing to your sight than gaily tinted birds flitting among the trees? Is the voice of locust, or the rasping chirp of cricket more pleasant to your ears than the melodious song of our little feathered musicians which nature has given for our cheer? Is it nothing to you that these happy little creatures of song play a most important part in the economy of nature, and that scientists and ornithologists the world over have declared the earth would soon become uninhabitable to man should all the birds be swept away? Is there no pity in your hearts when you think of birds with broken wings, and bodies torn by the hunter's shot, creeping away to some secluded spot to die, while the young wait in vain for the parents' return and at last perish of starvation in the nests? Must you forever follow the decrees of cold, imperious fashion, regardless of their cruelty, or whither they may lead? Must compassion, humanity, and all the better attributes of your natures be laid on the altar of pride and ostentation?

One little songster perched outside the window of a stately temple of fashion is worth far more than the display within of an aviary of dead birds; and one robin chirping about the lawn is far more pleasing to the sight than the piles of wings and feathers displayed in milliners' windows. Think of the woods and fields made desolate by the wanton destruction of the rainbow-tinted minstrels that were wont to greet the rising sun with their matin carols, and that, after lending cheer to the summer day, at evening chanted their vespers from the lofty trees.

To-day, in thousands of woodland dells that once resounded with the songs of birds, the only sound that greets the ear is the noise of insects, while the flowers, seamed and scarred by devastating foes, bow their heads in sorrow, and through the branches of the trees the wind sighs a mournful requiem for the departed songster tenants.

Let us change all this by protecting the birds, and giving them a chance to refill their depleted ranks and again make woods and fields merry with their music. Let us usher in a new era, an era of love of nature and her works; and to this end we ask, women of America, for your influence and support to protect the feathered minstrels.

FROM THE GAME FIELDS.

ASK YOUR CONGRESSMEN AND SENATORS TO HELP US.

The Hon. John F. Lacy, of Iowa, has introduced in Congress this bill for the protection of game and of song birds:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the duties and powers of the Department of Agriculture are hereby enlarged so as to include the preservation, distribution, introduction, and restoration of game birds and other wild birds. The Secretary of Agriculture is hereby authorized to adopt such measures as may be necessary to carry out the purposes of this Act and to purchase such game birds and other wild birds as may be required therefor, subject, however, to the laws of the various States and Territories. The object and purpose of this Act is to aid in the restoration of such birds in those parts of the United States adapted thereto where the same have become scarce or extinct, and to regulate the introduction of American or foreign birds or animals in localities where they have not heretofore existed.

The Secretary of Agriculture shall from time to time collect and publish useful information as to the propagation, uses, and preservation of such birds.

And the Secretary of Agriculture shall make and publish all needful rules and regulations for carrying out the purposes of this Act, and shall expend for said purposes such sums as Congress may appropriate therefor.

Sec. 2. That it shall be unlawful for any person or persons to import into the United States any foreign wild animal or bird except under special permit from the United States Department of Agriculture: Provided, That nothing in this section shall restrict the importation of natural history specimens for museums or scientific collections, or the importation of certain cage birds, such as domesticated canaries, parrots, or such other species as the Secretary of Agriculture may designate.

The importation of the mongoose, the so-called "flying-foxes" or fruit bats, the English sparrow, the starling, or such other birds or animals as the Secretary of Agriculture may from time to time declare injurious to the interest of agriculture or horticulture is hereby prohibited, and such species upon arrival at any of

the ports of the United States shall be destroyed or returned at the expense of the owner. The Secretary of the Treasury is hereby authorized to make regulations for carrying into effect the provisions of this section.

Sec. 3. That it shall be unlawful for any person or persons to deliver to any common carrier to transport from one State or Territory to another State or Territory, or from the District of Columbia or Alaska to any State or Territory, or from any State or Territory to the District of Columbia or Alaska, any foreign animals or birds the importation of which is prohibited, or the dead bodies or parts thereof of any wild animals or birds, where such animals or birds have been killed in violation of the laws of the State, Territory, or District in which the same were killed: Provided, That nothing herein shall prevent the transportation of any dead birds or animals killed during the season when the same may be lawfully captured, and the export of which is not prohibited by law in the State, Territory or District in which the same are killed.

Sec. 4. That all packages containing such dead animals, birds, or parts thereof, when shipped by interstate commerce, as provided in section one of this Act, shall be plainly and clearly marked, so that the name and address of the shipper and the nature of the contents may be readily ascertained on inspection of the outside of such packages. For each evasion or violation of this Act the shipper shall, upon conviction, pay a fine of not exceeding \$200; and the consignee knowingly receiving such articles so shipped and transported in violation of this Act shall, upon conviction, pay a fine of not exceeding \$200; and the carrier knowingly carrying or transporting the same shall, upon conviction, pay a fine of not exceeding \$200.

This is the best and most important measure ever introduced in the American Congress for the protection of game, and it now becomes the duty of every friend of game protection to write his representatives, in both houses of Congress, urging favorable action on this bill. Also to get as many other people as possible to do so. The bill is known as House bill No. 6,634, and should be so designated in all correspondence relating thereto.

Get to work on this *at once*. Don't lose a minute.—EDITOR.

A GOOD ARGUMENT AGAINST THE SALE OF
GAME.

Grand Island, Neb.

Editor RECREATION:

Replying to your letter, will say it is true I am buying and selling quails and prairie chickens; also true that I ship them out of the State. I knew it to be unlawful before you had the kindness to inform me, but the reason I do so is entirely different from what you imagine.

Before I go into details let me give you, please, some information about myself and my business. I have done business here for the past 8 years, dealing in sporting goods, guns, ammunition, fishing tackle, bicycles, cameras, etc. I am an ardent admirer of the rod and gun, and during the closed season on quails and chickens make up a little shooting tournament once or twice a week. I also make up a bicycle race now and then in the interest of the sport. I would not tell you this were it not necessary to explain why there are always people around in my store—people who either have nothing to do or care to do nothing but loaf. A sporting goods store is a favorite place for the boys to gather and talk about shooting and racing, about game and game laws, and about RECREATION, which to my mind is the best sportsman's magazine I am acquainted with.

Now, my dear Mr. Shields, I come to the point, why I buy and sell quails and chickens, and also why I ship them. There are in Grand Island 3 gun stores besides mine; all of them buy more or less game. If I should refuse to buy game it would mean such a big loss in business to me that I, perhaps, would have to close my doors. As my store and stock is the largest, not only in Grand Island, but also in Central Nebraska, I consequently do a big business, and as I must buy all the game the farmers and sportsmen bring I get more on hand than I can sell in the home market. I would buy no game at all if the others would not; but as it is, I must buy all offered and ship whatever I have over the needs of the home market out of the State, and in doing so do exactly as the others do. I, myself, shoot no game to sell, never have done so and never will. I never have killed any kind of game in such numbers as some of your contributors admit having done. For instance, in November RECREATION I read with astonishment how a game hog, who calls himself a tenderfoot, killed 3 deer in one day. I returned not long ago from this year's hunting trip of over 5 weeks' duration and killed during that time only 5 bucks, 6 sage-hens and 4 grouse for a party of 5. I could

have killed deer by the hundred, as we were in the White River country in Colorado. I often saw herds of 20 to 40, and once I counted 148 coming down a hill to cross the river.

To return to my store and the boys. One day one of them said it would be great fun to have Kanert reported to RECREATION for selling and shipping chickens and quails, and by your letter I can see that one of them has acted on the suggestion. If you will send me the letter you received, I in turn will send you a complete record of how many quails and prairie chickens I have bought from its writer. In conclusion I wish to say that almost every large city in Nebraska has formed a club for the purpose of having the game laws revised. During this year's election, we, the sportsmen, promised the candidate for representative our support on condition he would present a bill calling for a revision of the game laws of the State. This was done, and soon we will call another meeting to complete what we have begun. At the last meeting we decided to ask for the prohibition, at all times of the year, of the sale of game of all kinds. But as the best law is worthless unless it can be enforced, we want the Legislature to appropriate \$10,000 to \$15,000 a year to pay game wardens to look after violators, and especially to watch the depots so game cannot be shipped. Furthermore, every one of us is willing to pay an extra tax, say of 50 cents or \$1 a gun, with which to repay the State the money paid out to game wardens. I would like to see an even more radical law than this. If I had my way there should be no spring shooting and no quail shooting for 48 hours after a snowfall.

The number of grouse slaughtered around Alliance, Neb., is awful. If this is not stopped there will not be a bird left for seed, provided the report which I heard from that section is true. At any rate, quails and prairie chickens are being killed now in greater numbers than ever before.

F. F. Kanert.

ANSWER.

You certainly have good cause for your action in regard to buying and selling game. Still, 2 wrongs do not make a right; neither do 3 or 4 wrongs. I realize that you must take care of your trade and of your customers in a legitimate way, and 9 men out of 10 would do as you have done in this case.

The best solution of this question is to induce your Legislature to pass a law prohibiting the sale of game of all kinds at all times. This is the only thing that can save the game from extinction everywhere

within a few years. Your letter is a good argument against any law which allows the sale of game.—EDITOR.

WANTS LICENSED GAME DEALERS.

Hannibal, Mo.

Editor RECREATION:

The vigorous campaign you are making for the preservation of our wild animals, birds and fishes has my hearty commendation. Every civilized country should enact stringent laws for game and fish protection and exert with energy every power it possesses for the enforcement of those laws.

I notice, however, in this matter a tendency to go from one extreme to the other, from wasteful laxity to unreasonable repression, which works injury to the large proportion of our people who are least able to bear the hardships resulting from laws primarily intended for the good of all. Our people are composed of many classes:

The rich, who have little else to occupy their time than their own personal gratification.

The middle class who, while in active business, find time for personal pleasures and recreation.

Those of the latter class who find, or think they find, no time for recreation, but are always slaves to the cares of business.

The tradespeople, mechanics, artisans and laborers—the most numerous class of all—who find no time whatever to devote to their personal enjoyment.

Those of all the classes above named who find no pleasure in absenting themselves from their every-day occupation.

It is proposed by many that the selling or even giving away of game and game fishes shall be prohibited by law. This, to my mind, is an unjust discrimination against 99 per cent. of our people. It is right to prohibit killing of game in certain cases and under certain conditions. It is right to limit killing of game to certain months of the year and to confine hunting and fishing to 3 or even 2 months in each year. It is right to absolutely prohibit what is called pot hunting by city pot hunters through the entire year. It is right, also, to limit the quantity of game and fish each member of the L. A. S. and all other sportsmen may take during the hunting season. It is no hardship to prohibit them from selling or giving away game, nor to limit them to such quantity of game as they and their families can consume.

All these restrictions are right, but they apply to and profit only about 1 per cent. of our population. What, therefore, must the other 99 per cent., who never hunt, do?

Must they, whether sick or well, be debarred from eating wild game, for all time? When and how are they to procure their share of the game so lavishly provided by nature for man's use? Is it not clear that these provisions of nature were not intended solely for the benefit of the rich, or of such other persons only as are able to give their time to their own enjoyment?

I have to suggest, for the benefit of this 99 per cent. of the people who do no hunting, a proviso be inserted in all game laws that during the open season all farmers and other persons who own 20 acres or more of land shall have the right to take wild game on their own lands and on lands within 2 miles of their boundary lines, unless prohibited by the owners of such other lands; and to sell or give away game so taken to any game dealer who shall have been licensed by law, or to any other person who may desire to purchase for his own consumption. By this provision the great body of the people, as well as the rich and the gentlemen of leisure, may occasionally enjoy venison, quail, and other appetizing game. Besides, this privilege extended to farmers and land owners, to the exclusion of all other persons, is just, for the reason that wild game largely feeds on grain and other products of the land, and this privilege of taking game will partially reimburse land owners for the crops they have supplied toward the maintenance of this game. These farmers and land owners might be required to take out a license under the law, which would be a protection to them as well as to the game dealer.

In making our laws let us do equal justice to all. We should not allow the strong to dominate the weak, nor should we enact laws to build up in this country a privileged class, to have the whole country for their game preserve, to the utter exclusion of the remaining classes. It will not do to reply that all persons have the right to hunt and each may thus get his own share of game. While theoretically that is true, the fact is 99 out of every 100 persons are not able to act on those rights.

I should like to see this subject discussed in RECREATION, for only through discussion can your readers hope for a knowledge of the subject.

L. W. Boswell.

ANSWER.

You will find few advanced sportsmen who will agree with you as to the justice of allowing game to be sold at all. Nearly all up-to-date sportsmen who have given this matter a thought agree that the time has come when the sale of game must be stopped entirely, or we must

submit to the total destruction of several important species of game birds and mammals within a very few years. It is conceded by thoughtful men of to-day that the price of game should be the skill and the energy to go into the fields or the woods and kill it, and that men who do not possess these qualities should be content to eat poultry, or beef, or other domestic meats.

The great evil that results from allowing game to be sold is that in open season it is bought and placed in cold storage. Then from these cold storage houses it is sold clandestinely, in violation of law, all through the year, and is served in hotels and restaurants under various fictitious names. As a matter of fact, cold storage game is not fit to eat. It is an insult to the palate of any gentleman to place before him a bird or a piece of venison that has been frozen and stored for a month or more; yet many people who do not know the difference between a fresh bird and a frozen one insist on having game, at all times of the year and at any price, because they deem it aristocratic. To the victors belong the spoils. This should be true in field sports as well as in politics, and sportsmen who can kill game should be the only persons allowed to eat it.—EDITOR.

SYNOPSIS OF THE GAME AND FISH LAWS OF MICHIGAN FOR 1900.

GAME.

Open season for grouse, quail, spruce hen, snipe, woodcock and plover, Oct. 20th to Nov. 30th, both inclusive, except in the Upper Peninsula, where the open season for grouse is Oct. 1st to Nov. 30th, both inclusive.

Prairie chickens are protected until 1902.

Wild ducks, geese, brant and other water fowl may be killed from ½ hour before sunrise until 1½ hours after sunset from Sept. 1st to Jan. 31st.

Blue-bill, canvasback, widgeon, pintail, whistler, spoon-bill, butter-ball and saw-bill ducks and wild geese may be killed from Sept. 1st until May 1st.

The open season for killing wild ducks, geese, brant and other water fowl in the Upper Peninsula is from Sept. 1st until Jan. 15th.

Wild pigeon, Mongolian and English pheasants are protected until 1905. It is unlawful to kill mourning doves at any time. The killing of song or insectivorous birds of any kind is unlawful.

The sale of grouse, quail or woodcock is prohibited.

Open season for deer in any portion of the State, except Alcona, Lapeer, Huron,

Sanilac, Tuscola, Macomb, Allegan, Ot-tawa and St. Clair counties, Nov. 8th to Nov. 30th, both inclusive. All hunters must be provided with a license to hunt deer. The resident license fee is 75 cents; non-residents, \$25.

It is unlawful to make use of dogs in hunting or pursuing deer, and the presence of a hound in a hunting camp or club house during the hunting season is made *prima facie* evidence of guilt.

Five days are allowed hunters to get their deer out of the woods after the close of the hunting season, after which it is a violation for transportation companies to transport or have them in possession.

Moose, elk and caribou are protected until 1909.

Wild turkeys are protected until 1905.

Open season for hunting foxes, black and gray squirrels, Oct. 1st to Dec. 31st, both inclusive.

GAME FISH.

Open season for catching speckled or brook trout and grayling, May 1st to Sept. 1st. It is unlawful to have in possession any speckled trout or grayling of a less length than 6 inches.

The catching or shipping of brook trout or grayling for sale is prohibited.

Black, strawberry, green or white bass may be taken, with hook and line only, at any season of the year.

The use of any kind of nets in any of the inland waters of the State is unlawful, except in streams not protected by local act, where dip-nets may be used for taking suckers, mullet, reddsides and grass pike.

The transportation or shipment of any game or game fish beyond the boundaries of the State is prohibited.

Beaver are protected until 1906.

Open season for taking otter, fisher and marten, Nov. 15th to May 1st.

COMMERCIAL FISHES.

The taking of white fish and lake trout is prohibited from Oct. 30th to Dec. 15th, except in that portion of Lake Erie bordering on Monroe county, where the closed season is from Nov. 15th to Dec. 1st.

Herring and other rough fish may be taken in pound nets from April 1st to July 15th, and from Sept. 1st to Dec. 15th, where it will not interfere with or catch immature whitefish or trout.

Heavy fine or imprisonment, or both, is provided for a violation of any of the provisions of these statutes.

An official compilation of the game and fish laws of the State may be obtained by addressing the State Game and Fish Warden at Portland, Mich.

GIVING AWAY GAME.

I have read, with some sympathy for the hogs, your caustic strictures on them. It has never been my fortune to be placed in a position where I could indulge swinish inclinations; indeed, my usual luck is an empty basket. I am not, nor do I ever expect to be, in a position to take long and expensive trips to virgin waters, and my opportunities for sport come at infrequent intervals. While I always make it a point to return to the water all undersized fish, I should not hesitate to take all I could carry of proper size. Seldom have I been rewarded by a catch beyond the immediate wants of myself and family, but I shall not soon forget the pleasure with which some friends welcomed my gifts, nor my own delight at being able to gratify desires which, without my aid, would have gone unsatisfied.

It is well for you to write that those who cannot capture game should not eat it, but have you ever been laid up for months with a smashed thigh bone and a capricious appetite, and had a dainty quail or canvasback sent you by some sympathetic friend?

This confession may make me a hog, but if I do nothing worse than give game to my friends I shall take my chances of sneaking by Saint Peter on my fishing record—and all this with my respects, Mr. Editor.

W. A. Campbell, Rockport, Me.

ANSWER

W. A. C. is right and yet he is wrong. Years ago it was all right for a man to catch all the fish or kill all the game he could, for fish and game were so plentiful that there was no urgent need for protection. With the increase in population, the settling up of the wild portions of the country, the growth of taste for outdoor sports, the improvement in guns and fishing tackle, the very existence of all game and fish is now seriously menaced, and it is simply a question of curtailing each man's catch or kill to the minimum or the total extinction, within a few years, of all game and game fishes. Hence it is necessary to let each man do his own fishing or shooting or do without fish and game. Of course, this would work a hardship on many people, but it is better that some should suffer inconvenience than that all should.

I have never yet been so unfortunate as to have my leg broken, though I have often had it pulled until I thought it would break. Many of my friends have been unfortunate in one way or another, and I have taken as much pleasure in supplying them with a quail, a snipe, a woodcock or a squirrel as any man ever did in doing

good, but we must draw the line somewhere, and the time when a man may safely fish and hunt for himself and his neighbors is past.—EDITOR.

PROBABLY A CASE OF DISTORTED VISION.

On the Western slope of Marshall pass, on the line of the D. & R. G. railway, there is, according to the reports of several men whose veracity cannot be questioned, a monster mule deer, which seems to possess a charmed life. He has been hunted and found, seen and shot at; and once a hunter got so close as almost to be able to prod him with his rifle. The hammer clicked, and the deer still enjoys life and liberty. Another man says he would bet any money that the deer would dress 500 pounds, and this opinion is seconded by several others who have seen the old buck. A man can lay his open hand in the track of this deer without touching any side of it.

One man who saw him reported that he had seen an elk leading a bunch of deer; but the description of the horns proves him to be, not an elk, but this same immense deer.

Can you or any of RECREATION's readers offer any explanation of the unusual size of this old fellow?

RECREATION has many admirers in Salida, and we all anxiously look forward to its monthly appearance.

George P. Brewster, Salida, Col.

ANSWER.

I am inclined to think the hunters who have seen the big buck have been afflicted with magnified vision, and possibly with buck fever. I do not believe there is a deer anywhere in the mountains that would dress 350 pounds. No doubt this fellow is a giant, and it would seem that the measurements of the track you give should be reliable; yet, the reports are incredible.

Many stories have gained credence in various parts of the country about big deer, but somehow or other, when these animals have finally fallen victims to some man's rifle, they have shrunk sadly, and none of them has ever measured up or weighed up to the imagination of the men who had hunted them. So it will doubtless be with this old chap. Still, I am deeply interested in the story, and trust that whoever does land this prize will put him on the scales, either gross or dressed, and that he will make careful measurements of the animal, in accordance with the diagram and instructions given by Mr. E. S. Thompson in May, '98, RECREATION. If the buck does prove a monster, then these weights and measurements should be attested by affidavits.

The theory about the deer being bullet proof is, of course, entirely imaginary. If ever any good shot gets a proper line on him, with a good cartridge in a good rifle, and pulls the trigger, you may rest assured your buck will quit, just as he would if he were only half as big.

ARRESTED FOR VIOLATING GAME LAW.

Few deer have been killed here, as the weather has not been favorable for still hunting. I think there has been no hounding by residents of this place. I have heard several times of dogs coming through from North Elba and of deer being driven into the river here. It is noticeable that the deer are getting tame, and are feeding near the village. I think there are but 2 hounds kept in the place. Two years ago there may have been 100; so the anti-hounding law has done some good, even if it is violated now and then.

Game Protector Budi caused the arrest of a lumberman for killing a deer out of season. The case came to trial, the jury failed to agree, and a new trial took place. The defendant was not the man who killed the deer. It was killed by Kelly, the superintendent of the camp. One of the workmen, named Field, was the first witness. He testified that he shot the deer; that Kelly had offered \$5 to anyone who would bring in a deer, and if they succeeded in killing one their time spent in the hunt would not be deducted.

He testified that Kelly sent a man named Parker to bring in the deer; that it was brought to the camp in a bag; that the carcass had been opened and the head removed, but that the feet were on. A man named Smith, whose wife cooked for the camp, told of Kelly's asking him to dress the deer; that he did help Kelly do so, and that Kelly told his wife how to cook it. The wife also testified that the deer was cooked and served for dinner the same day it was killed, the 29th of June, and that Kelly ate of it. Kelly swore that Field came to him in the woods and told him he had a deer down at camp; that he told Field if he had, to go and remove it from there as he did not want it; that he ate fresh meat that day, but did not know what it was. There were several other witnesses, but nothing of importance. The jury brought in a verdict of guilty. Kelly has appealed the case. It was shown that he did not supply the food for the camp, or hire or pay the men; that he gave them orders on Orlando Beebe, and was there merely as a superintendent. I am told that Field, who killed the deer, could not pay the fine, and was induced to plead guilty with the promise that sentence should be suspended and he permitted to go free if he would testify against Kelly.

I trust this case will have some effect on other lumber camps.

M. D. H., Keene Valley, N. Y.

THE PASSING OF 3 DEER.

I once went hunting with a friend named Gillespie. He armed with a double barreled gun loaded with buckshot and I with a .44 Winchester. We came to a beaver meadow about 200 yards wide, and I took one side and he the other. A deer ran out about 40 yards from Gillespie and down the meadow. I fired and broke both its hind legs near the gambrel joint and the deer dropped.

Gillespie ran up and hit it with his gun. The deer jumped up and made for him, and he started down the meadow as fast as he could go, yelling to me to shoot, with the deer about 4 feet behind him. I lay on the ground and laughed, and could not have shot if his life depended on it. Gillespie ran about 200 yards and climbed some rocks, where the deer could not follow. Then he remembered his gun and shot the animal.

I had quite an experience when still hunting a year or so ago. There was about 2 inches of snow on the ground. A 3-prong buck started to run up a slope 100 yards from me. I fired and the deer fell. When I got close to him I saw the bullet had hit the left antler, near the head. The shock knocked the deer down; its right horn slipped under a root, which held it until I came up and used the knife.

I was once crossing a burn with 5 other fellows, all armed with repeaters. A deer jumped up about 150 yards off, and we each fired at it 2 or 3 times. It ran 50 yards and dropped dead. We looked it all over and could find no mark on it. I skinned it and still could find no trace of a wound. What killed it?

Ahmic lake is on the Magnetawan river, 40 miles from Burks Falls, the nearest railway point. Deer are still fairly plentiful, and there is an occasional moose. Wolves are getting scarce, though there are still a considerable number farther in.

Geo. H. Ross, Ahmic Lake, Ont.

REINDEER IN ALASKA.

Dr. Sheldon Jackson, Commissioner of Education for Alaska, has issued his annual report for 1899, in which he gives some valuable information regarding the importation, distribution and breeding of reindeer in that country. In all, 699 of the animals have been brought from Siberia. The first were imported in 1892. The herd now numbers 1,859.

There are 671 of these deer in Unalaklik, 120 miles above the mouth of the Yukon. At Teller station, named after

Senator Teller, who has been an ardent advocate of this enterprise, are 186, at Cape Prince of Wales 216, at Golovin bay 395, at Point Barrow 381, and at Circle City 144. This does not include 144 reindeer which were imported from Lapland by the War Department for the purpose of conveying food to the gold miners in the Klondike. It will be remembered that this enterprise was never carried out. All of the 144 males and 350 of the Siberian reindeer were driven to Point Barrow to feed the crews of the whaling ships which had been caught in the ice. It was found, however, that the whalers had all the food they needed, and the animals were not eaten, as had been intended.

About 20 Lapps, native deer-men of Lapland, were brought over to take care of the reindeer in Alaska. These have taught the Alaskan Indians how to take care of the deer, regular schools having been established for that purpose. Apprentices graduating from the schools receive a certain number of deer, representing in each case the nucleus of a herd. Several such herds have been established by Indians, who make a good living from them. There is an abundance of moss in Alaska, which is the natural food of the reindeer, so they are likely to thrive and become abundant there.

GAME PRESERVES AND GAME PRESERVATION.

Permit a friend of RECREATION and an old hunter, with 30 years' experience in the old country and as many in this, to give some pointers on game preservation. Your fight against the game hog is all right, but why not teach hunters not to shoot does and fawns? How can game multiply if the females are killed? Of the 5,000 deer shot in the Adirondacks last year at least 3,000 were females. In the old country the hunter who kills a doe is disgraced; he is heavily fined, and is never more invited to any shooting party.

Again, I fear you do not always roast the right person. The man who has but one chance in a year to hunt can not do much damage, even if he shoots more than his share. It is the rich, idle man, it is the money bag and not the hunting bag, which reduces the game in this country. I know men belonging to swell hunting clubs who cannot hit a barn door at 10 yards. Yet these men always return from a hunting trip with 50 or 60 rabbits or birds. How do they get them? Easily enough. Their club membership gives them the privilege of hiring the game-keeper to shoot game for them on the club preserve.

It is a fact that the more game preserves there are the less game there is in the woods and fields. In a few years it will

be here as it is in England, where the poor man has no chance for sport.

M. J. Seeburg, Washington, D. C.

APPROVES THE CRUSADE AGAINST GAME HOGS.

The more I read RECREATION the better I like your style of doing business, especially in the line of game, fish and bird protection. The educational power of the magazine along this line cannot be overestimated. I should judge from the squeals I hear from Webber and others of his class that some of your gentle hints have touched the tender, or, I should say, rotten, spot in some one's anatomy. But you probably never hear from a quarter of the bull's-eyes you have made. Many decent men kill too much game until they happen to pick up your magazine, and after reading it they resolve to "go their way and sin no more," and you hear nothing about it. The question of game and forest protection is of vital importance to every lover of nature. The game laws are a dead letter in this locality. The game warden has a large law practice and gets no salary as warden; therefore he doesn't turn his hand over toward enforcing the laws. I have seen the law violated on his own property, and informed him of a gang who were dynamiting fish almost at the back door of his summer residence on French creek, but he took no action. A local organization of the L. A. S. is what we need here.

A. E. Hatch, Union City, Pa.

GAME NOTES.

Two years ago in June I went with friends trout fishing on the Madunkeunk, a stream 8 miles from here. At a place where the ground had been made unusually soft by recent rains I saw some large moose tracks, which were punched into the ground to the depth of a foot. I told the boys to notice the tracks and passed on. One of the party called me to come back and see the deer he had found. I had stepped directly over a track which contained a small fawn. It was dead and lay curled up in the track like a kitten. We thought it could not be over one day old, and perhaps not that, and had either been dropped by the doe directly into the moose track, or had fallen in and could not get out. It was about the size of a house cat, but with longer legs. Perhaps some reader can tell us how old it was.

E. A. Weatherbee, Lincoln, Me.

Hon. L. T. Carleton, Chief Fish and Game Commissioner of Maine, has issued his annual report for 1899, in which he states that 1,780 guides are registered in that State. He says 15,312 people have

employed these guides during the year, and that 7,579 deer and 216 moose have been killed. This is an average of about one-half a deer to each sportsman. It should be remembered, however, that a great many men who employ guides do so only for fishing; so that if the 2 classes were divided it would probably be shown that there has been killed about one deer, on an average, by each hunter.

My business takes me through the country a great deal, and some of the trips are made on my wheel. I find quails plentiful. Go where you may through this section and you will hear the merry notes of Bob White. Quails hatched early, and a great many will rear a second brood. Sportsmen anticipate great shooting this fall. Squirrels are scarce, but rabbits are plentiful.

F. M. Leech, Lima, O.

Our Colorado game law opens August 15th on deer and antelope and closes November 5th; horned elk, October 25th to November 5th. I took a party of New Yorkers out the 9th of June. Our dogs put a bear up a tree and it was shot by Miss Pomroy. We were out only about 5 hours.

W. H. Hubbard, Glenwood Springs, Colo.

Elk are coming back to their summer haunts in the mountains, and the foothills are full of them. Thirteen wintered in sight of my ranch. Antelope are here by the thousands, and can be seen on every hill. Soon the Indians will be here slaughtering elk and antelope. Is there any way of getting Uncle Sam to keep his pets at home?

W. G. Warren, Echo Dell Ranch, Wyo.

Replying to Mr. Wagner, Emporia, Kan.: There is no hunting or fishing in the neighborhood of either Springer or Los Vegas. Both places are in a barren district. The climate is dry but disagreeable, the wind blowing a gale for weeks at times, filling the air with dust.

Fred. W. Hambledon, Tres Piedras, N. Mex.

Mr. G. E. Morris wants a law forbidding minors to hunt. I am 16 years old and if all hunters and hogs shot as many song birds as I have there would be millions of them left, because I never shot one in my life. I use 12 and 10 gauge shot guns and a .38-55 rifle, and I'll bet I am more of a sportsman than Mr. Morris.

Bernie Doyle, Rotterdam Jet., N. Y.

Without doubt there will be good chicken and quail shooting here this fall. Last fall shooting was better than for a number of years past. If game continues to increase in the next 5 years as it has in the last 5 there will be plenty of sport in this part of Nebraska. Wild geese and ducks were not plentiful this spring.

Geo. W. Nellis, Dannebrog, Neb.

Our fish and game club is doing good work in stocking the streams and seeing that only legitimate methods are employed in taking fish. Our hardier birds seem as numerous as usual, notwithstanding the severe winter, but I notice quite a falling off in some of the smaller and less hardy ones.

James M. Graves, Potsdam, N. Y.

Florida has practically no game laws; they are so inconsistent as to be void. I lived in the Southern part of Polk county. Our open season was the winter months. De Soto county, adjoining us, has an open season during the summer. The result is not hard to find—the game is.

Fred. W. Porter, Augusta, Ga.

This is a great country for game. Elk, moose, deer, caribou, goats, hundreds of sheep and fur-bearing animals of all kinds, and fish. I have caught fish here called char, weighing 25 pounds each. We use more .44-40s here than anything else, and I have killed lots of bear with one.

Wm. J. Moore, East Kootenai, B. C.

The boys here are all content with a fair bag of game. There are millions of birds, yet parties of 2 or 3 persons never bring in more than 40 in a day. I am afraid the quails were all killed last winter. I have not heard of any being seen since the cold weather in February.

W. L. Phelps, West Plains, Mo.

This is a good place for game. The hard winter did not affect quails. They are whistling in every field. Grouse are plentiful, and jacksnipe and woodcock are not scarce. Plenty of fox squirrels and rabbits.

F. Kingsford, Fremont, Mich.

I have given every copy of RECREATION received to a member of a gun club who would once have shot an egg if there was a chicken in it. Now he sees where the game has gone, and regrets his part in its destruction.

J. H. Weir, Boone, Iowa.

FISH AND FISHING.

CALIFORNIA TROUT.

San Francisco, Cal.

Editor RECREATION:

Fishing in the mountain streams of California is well under way by April 1st. Then the water is clear and cold, and the trout are wide awake to all tricks of the angler. The beds of our streams, near the headwaters, are rocky, and thus many waterfalls are formed, under which trout may usually be found. Sometimes, however, they refuse to be coaxed out, even by what we think the most tempting fly. But if one does come, he comes with a rush, and perhaps we will hear a little flap in the water as he throws his tail out, almost turning a somersault in his haste to get the fly. At times he is sulky, and, lying in the shadow of some rock in the pool, will not deign to notice the fly we dangle under his nose.

Many of the smaller streams are near San Francisco, and as they are visited by many fishermen, fish in them are becoming scarce. In some places poachers fish before the season opens, and when the honest angler, who has waited patiently for the 1st day of April, visits his favorite stream he is surprised and disappointed to find some one has been there before him. The only thing for him to do is to seek some out-of-the-way place farther from civilization.

Our brook trout are usually about 6 inches long, although once in a while we hear vague tales of a monster some one had seen or even hooked, only to lose again. Some of our lakes are stocked with rainbow trout, which may be taken from a boat, by trolling. Lake Tahoe is probably the best in the State for this kind of fishing, and is easy of approach. Tallac, a hotel on the farther side of the lake, is a good stopping place, for it is near the other smaller lakes—Fallen Leaf and Cascade. The tackle used consists of a large wooden reel, on which is wound about 100 feet of line, the upper part of heavy cord and the lower of copper wire. Several large hooks are attached, and above them a large spoon. Minnows or grub worms are used for bait. A heavy jerk is felt when the fish strikes, and he really hooks himself; so little demand is made on the angler's skill. The fish is given no chance to fight, for he is hauled in, hand over hand, as a cod would be.

On Tahoe we do not catch as many trout as on the other lakes, but they are larger; a fish weighing less than 2 pounds is seldom caught, and often a 12-pounder

is brought back in triumph. Almost every day some one brings in a fish weighing 6 or 8 pounds. The largest trout ever caught there, I believe, weighed 29½ pounds. These lake trout have salmon-colored flesh, and, in fact, taste much like salmon. For a large catch Fallen Leaf is about the best lake, and one may sometimes take 40 or 50 fish a day, although they will average only about ½ pound.

But this country is not all lakes, and the angler will find use for his small rod and flies. Truckee river has in it some large trout, which can be taken with rod and fly, and good catches are made in the creeks emptying into the lakes. Besides Tahoe, there are numerous lakes in Northern California, Klamath and others, which are seldom heard of, hard to reach and which afford fine fishing. Many of the creeks emptying into the ocean South of San Francisco form lagoons, which abound in small trout. This is an enjoyable kind of fishing, for there are no trees in which the inexperienced angler may tangle his line. But he cannot hop along on rocks in an endeavor to keep dry, as he might do farther up the creek, for the bottom is level and sandy. He must wade through the water, in some places waist deep. The flies used are all small and are about the same as those used in other streams. For dark flies the gray and brown hackle and the black ant are good; and for the bright ones, the professor, royal coachman and red ant attract the trout. Of course the flesh of these fish is softer than of those in the mountains, and they will not keep as long, but they taste just as good, if eaten immediately after being caught.

Arthur Willard.

PARASITES IN FISHES.

What causes grubs in fish? Why are fish from some waters infested and those from other waters in the same territory not? Our river bass are nearly always grubby, and we have one lake in which the bass are so the year round. Why are pickerel not affected as well as bass?

J. C. Newbrough, Greenville, Mich.

ANSWER.

The causes of grubs and other parasites in fishes are varied, diverse and as difficult of explanation as are the causes of the many diseases which afflict mankind.

Among the environmental conditions which are factors in determining the healthfulness of a fish may be mentioned

the following: 1. Character of water as to purity, temperature, aeration, etc. 2. Character and extent of vegetation in the stream or lake. 3. Nature, variety and abundance of the food supply. 4. What other species of fishes occur in the same waters and the abundance of each. 5. The water birds and other animals frequenting the region. 6. The contamination of the water by refuse from saw mills, paper mills, mines, or other sources.

These are only a few of the more important factors; there are doubtless many others more or less potent. The trout of Yellowstone lake furnish a good illustration. Many of the trout of that lake are affected by a parasitic worm which is not ordinarily found in the trout of other waters in that region. This parasite was studied a few years ago by Prof. Linton, who found an intimate and interesting relation existing between this condition of the Yellowstone lake trout and the white pelican which frequents that lake. In fact, he found the presence of the parasite in the trout directly due to the white pelican. The relation is as follows: During one stage of its existence this parasite lives in the intestinal tract of the pelican; after a time it is voided and falls in the water. The trout swallows the parasite, or perhaps the parasite may attack the trout. Then the pelican eats the trout and the parasite again attacks the pelican. After a time the parasite is again voided by the pelican and the cycle is complete.

The warmth and chemical character of the water in some parts of the lake doubtless have something to do with weakening the trout and rendering it susceptible to the attacks of the parasite.

Conditions which are unfavorable to one species of fish may be less so to another; and a parasite which attacks one species may never attack other species. As a matter of fact, the parasites found on any certain species of fish are peculiar to it and are not found on any other species. The same is true of the parasites of most animals. The reason that the pickerel mentioned by Mr. Newbrough do not get grubby may be that they are immune from the bass grub. Or the relative abundance of the bass and pickerel or their food supply may be the cause.

Questions like these, however, can be fully and definitely answered only after a careful study of the conditions in the particular stream or lake under consideration.

TROUT FISHING ON LAKE NEPIGON.

Clarenceville, P. Q.

Editor RECREATION:

The North shore of Lake Superior, and especially the country about the Nepigon river, is a paradise for the trout angler.

Enthusiastic as he may have been before, here his enthusiasm will be increased tenfold when he realizes the glorious sport to be had in this region. With a pair of hip boots he may wade the river up or down stream, while from either shore or mid-stream he can catch fish until surfeited.

In June and July flies are a more attractive lure than they are later in the season. It is doubtless a bit of fine heroism to refuse to catch a trout with a worm. Still, there are individuals so fascinated with the splendid excitement of landing a 6-pound trout after a thrilling fight that they are even willing to take an Indian's advice and cast with a piece of bacon rather than go home heroic but troutless.

The Ontario government is strict in the enforcement of laws regarding fishing, but at the same time these laws are extremely generous. No angler may take more than 15 pounds of brook trout in a day, and he must return to the stream uninjured any trout less than 5 inches in length. In the early days of September Carp river, which rises in Lake Kayozekeegawaigeenaig, is literally alive with trout weighing 2 to 5 pounds. They will tax one's utmost skill to land, and are game to the last gasp. The fish seem to show no diminution and all through the season there is royal sport in the swift flowing Carp.

The greatest of all trout streams, however, is the noble Nepigon. Here one may land a brook trout weighing 4, 5 or even 6 pounds—a fish with the concentrated agility of a score of little trout, and without a trace of senility in his aged frame.

The Nepigon runs from Nepigon lake, a large body of water 500 miles in circumference and nearly 300 feet above the level of Lake Superior. The river is only 40 miles from lake to lake, as the crow flies. Several small lakes are strung on its current like beads on a string. Here and there are easy portages, and there is not a spot in its entire length where one cannot find good sport. Fish wardens patrol the river all through the season to see that no one catches more than his lawful allowance, and to see, also, that all camps are kept scrupulously clean. The Indian guides and canoemen have a clever way of skinning a large trout, fastening one-half of the skin to a piece of birch bark and placing all in a frame of birch branches, which makes a fine trophy. The trout of Lake Nepigon and the larger streams are lighter in color than those of the forest, not at all clear and bright, but of a rich brown or amber hue.

The Nepigon is reached by the Canadian Pacific routes, either rail or part water and part rail, from Montreal, or any Eastern city.

M. P. Edy.

A GOOD FISHING GROUND.

Lake Maxinkuckee is in Marshall county, Indiana, on the Vandalia railroad, about 30 miles South of South Bend, and is one of the best fishing waters in the State. It is about 2 by 3 miles, and the greatest depth about 90 feet. The larger portion, however, is less than 50 feet deep, and in certain places are rank growths of bullrushes, which furnish excellent nursery grounds for young game fishes. The lake is surrounded by high, dry shores, 10 to 40 feet above the water level, and covered with beautiful groves of oak, maple, hickory and other hard wood trees, among which are ideal sites for summer cottages. Many prominent citizens of Indianapolis, Terre Haute, Logansport and other cities have summer cottages there.

Both species of black bass are found there in abundance, and each is extremely game. The summer temperature of the water (49° to 51°) in the deeper parts of the lake is low enough to make the fish good fighters. The wall-eyed pike is also found there, and is game during certain parts of the season. Among other species which furnish much sport, especially for the women and children, are the rock bass, yellow perch, war-mouth, blue-gills and other sunfishes.

During the past summer a U. S. Fish Commission party under the immediate direction of Dr. Evermann made an exhaustive physical and biological survey of Lake Maxinkuckee. They began work July 1 and continued the investigation until late in the fall. Regular temperature observations of water and air were taken, and the character of the bottom and shores determined. Besides collecting and cataloguing all the species of animals and plants found in the lake, careful investigations were made to determine the kinds and quantity of fish food in it.

B. W. E.

WHEN TO GO.

What is the best time of year to visit Lake St. John, Canada, on a canoeing, fishing and hunting trip?

What is the best time for ouananiche on the Grande Decharge?

Is there fairly good trout fishing in the surrounding country?

H. N. Smally, Philadelphia, Pa.

ANSWER.

I referred your questions to a gentleman well posted on the Lake St. John region, who answers as follows:

My fishing trips to the Grande Decharge were in June and July. The earlier fishing was the better. I have heard it is not so good in August, but that the pools in the Metabetchouan river, which are as readily accessible as the Grande Decharge, afford

excellent sport at that time. Elsewhere the best late ouananiche fishing is found up the Peribonca and Mistassini.

I can not tell about the trout fishing. It is my impression that most of the easily reached trout waters South of Lake St. John are preserved. There is, however, unlimited sport for the trout fisherman in the Peribonca and Mistassini rivers and their tributaries.

The Hotel Roberval people advertise that their guests do not require licenses to fish the tributaries and outlets of Lake St. John. It was so when I was there, and is now, for all I know.

A FIGHTING PICKEREL.

"How are you going to spend the 4th?"

Like one of old I answered: "I go afishing."

"I, too," said my questioner.

Then I remembered that a young man had begged the privilege of rowing the boat in order to see a muskalonge caught. Early on the morning of the 4th we found our oarsman ready and willing, and, taking him in, we drove 7 miles to the water. Our stream is small and snaggy and large fish are scarce; but promising our oarsman plenty of rowing, we put out one spoon each and started for a dam, 4 miles down stream. When perhaps half way there I was made aware of trouble behind the boat.

"Look out!" cried my friend, as I turned.

Sure enough; my prospective catch was making for a stump near the bank. but by using the reel and "hitting up" our boat at the same time we kept him away. Fish don't think, of course, but how careless they are about going into weeds or under logs when they could just as well keep in clear water. Finally, by using considerable strength I boated my fish. Muskalonge? No; nothing but a pickerel, 42 inches long and weighing 12 pounds. We continued down stream to the dam. On the way back we caught a muskalonge that weighed 8 pounds. For some reason he did not keep up the family record, for he did not once jump out of water.

Stubbs, Orwell, O.

CATFISH IN DRY WEATHER.

A discussion came up the other day that I should like you to settle. Where do catfish go when the water in a basin or a creek dries up?

Arthur L. Nuquist, Stromsburg, Neb.

ANSWER.

The various species of catfish are very tenacious of life and will live in a mixture

BEST BAIT FOR BASS.

There are 3 or 4 lakes a short distance from here, that contain some large bass which are said to come to the surface and bask in the sun. The man who told me about these lakes says the bass cannot be caught with hook and line; that he has tried several different baits, including minnows and the helgramite. The water is clear, deep and cold. Can you tell me any way to get these fish to take hook and line?

H. W. Mort, Dayton, Ohio.

ANSWER.

The bass you mention are doubtless the large mouth black bass, and it is not likely their habits differ greatly from those of this species elsewhere in Ohio, Indiana and neighboring States. My experience in that region has been that these fish are not difficult to catch. Last August, September and October I saw them taken on the artificial fly, artificial frog, spinner, and by trolling, either with the spoon or live minnow. The live minnow was the best. Try it next fall.—EDITOR.

EXTERMINATE THE CARP.

The fishing and duck shooting in Rock river, Lake Koshkonong, are seriously threatened by the German carp that were put in the river about 10 years ago. They multiply with great rapidity, and where they feed they roil the water so much as to drive away bass, pickerel, pike, etc. They eat all the spawn they find, also the wild celery, of which ducks are so fond. Reliable parties told me that one day they saw a space of 40 or 50 acres in one of the bays of the lake literally alive with carp, and I have seen vast numbers of the fish up the river where it overflows the marshes. The German carp bids fair to rival the English sparrow as a nuisance. All States should permit shooting, spearing and netting of carp at all times.

H. P. Pettit, Fort Atkinson, Wis.

NIBBLES.

One morning I started out to catch a mess of silver bass, or rock bass. I took a cane rod, a linen thread for a line, and a small trout hook, which I thought was strong enough to catch small fish with. Reaching the lake I cast in just above an old dam. In a moment my thread line began moving outward. I yanked, expecting to land a small fish, but found I had something larger to deal with. After a struggle I succeeded in landing a 5-pound black bass. I fished 2 hours longer and caught a pickerel that weighed 7 pounds on the same line. He broke the hook just as I landed him. I love to fish and hunt,

of water and mud where most other fishes would perish. This is particularly true of the bullhead, which inhabits small, sluggish creeks and ponds such as are common in Nebraska. During seasons of drought these creeks or ponds may become reduced to isolated pools with little water in them, yet sufficient to keep the catfish alive until rains come again. If the stream or pond dries up entirely, so that not even any soft, wet mud is left, the catfish will die, unless he migrates to some place where there is some water. In such cases as this the probabilities are that, when the water begins to dry up in the creek, the catfish move up or down stream to some point where water is left. In the case of a pond drying up the fish in it would perish, and it would be restocked again, when the rains come, by fish coming in from some other pond or stream. Catfish, or any other fish for that matter, are found only where they can swim from some other body of water. They do not rain down, nor do they originate *de novo* in any body of water. While they cannot live through the dry season where there is no moisture at all, still they can get along for a time in a small quantity of water which would be fatal to most fishes.

B. W. E.

PECULIAR TROUT.

I lately caught 2 trout which I can not identify, though I have seen perhaps 6 in all within 3 years. They are white or silver color, with no small red spots. I once spoke to Prof. Bean about them, and he thought they must be salmon, though salmon have never been found in the streams about here. The last specimen I took was the largest I ever saw. It weighed about $\frac{1}{4}$ pound.

R. M. Shurtleff, Keene Valley, N. Y.

ANSWER.

I can not, from the brief description given, be certain to what species the trout may belong. They may be young land-locked salmon, *Salmo salar sebago*, but this is extremely doubtful. The State Fish Commission has introduced several species of trout into New York, among them the rainbow trout, lake trout, brown trout, and, I think, the black spotted trout. It might be any of these. The only way to be sure is to preserve one or more specimens for identification. I shall be glad to identify any specimens sent me. As to the presence of scales, all species of trout have these. Those which on superficial examination appear to have none have really the most, the number being very great and the size of the individual scale small.

B. W. E.

but am no game hog. Give the hogs about 4 dips and then scrape well.

Manly Dunham, Zillah, Wash.

The largest tuna on record, as having been caught with rod and reel, was taken July 3d by Colonel C. P. Morehouse, of Pasadena. This fish weighed 251 pounds and fought 3 hours and 20 minutes before it was brought to gaff. Until this capture the record was a 183-pound fish, though a 215-pounder had been taken on a hand line by another person. On July 4th Mr. F. V. Reider landed a tuna weighing 175 pounds, and Mr. J. L. Adams caught a 186-pound jewfish. The fishing was excellent all along the coast of California last season, and many large fish were taken. Six fish caught at Avalon in one day weighed 1,023 pounds.

B. C. Hinman, Los Angeles, Cal.

Some of our fishermen are disgruntled because of the new law which forbids the taking of fish in any way during May and June. I have studied this law carefully and approve of it as a whole, but I object to 2 of its sections. One permits the use of a trout line with 50 hooks; the other permits seining. Both sections are a disgrace to the State. Another section is a peach. It limits the catch of bass and other fish to 24 for one man for one day. Two men fishing from a boat with seine are permitted to take 36, none less than 6 inches long. This section is a choker for the hogs.

Thomas Buchanan, Huntington, Ind.

Most of our waters have been muddy all the season, only a few being clear enough for fly casting. Still, I have found much enjoyment in casting for the blue gill and yellow belly sunfish, using black gnat or hackle flies with a white one for a stretcher. I make my own flies—just a few horsehairs tied on a hook—but like them better than bought flies. I enclose one which I find good, and as it is unlike anything I have seen I have named it "hickory brush." The last time I was out I caught a 2-pound bass on one while fishing for "sunnies" and casting 30 or 40 feet from a boat.

E. E. Hickok, St. Louis, Mo.

Deputy Game Warden Johnson, of Rock county, Wis., arrested Andrew Fisher for using a set line, and Charles Parsons for using a net. Fisher was sentenced to 15 days in jail, and Parsons to 50. This is the latter's second offense. He served 20 days last fall for using a sneak-boat for ducking. The warden says he'll break up the Rock county gang of game law

violators if it bursts the jail. They smashed 2 of his boats recently, but he has a new one and is still on deck. A photo of Lee Alder, of Edgerton, Wis., was sent to you. He is one of the worst of the gang of fish spearers and sneak-boat gunners.

S. P. Brown, Janesville, Wis.

Mr. Hayner's query in May RECREATION reminds me of an experience of my own. Last July Mr. E. P. Clark and I were fishing for bass on the Delaware river at Lackawaxen, Pa. In running one of the numerous rapids which are found in this stream we had the misfortune to upset, and of course everything was spilled. After a good many hours' hard work we recovered a few of our articles, among them 2 rods. To our surprise we found on one rod a 2-pound bass and on the other a 3-foot black water snake. We were using small catfish for bait.

J. H. Kidd, Newburgh, N. Y.

I intend to do some trout fishing next season, and as I do not wish to be called swinish by my fellow sportsmen, I come to you for information. What do you consider a fair day's catch? What do you consider a fair number of times to fish in one season?

Chas. E. Steen, Findlay, O.

ANSWER

I consider 10 pounds of trout a fair day's catch, and think a man should be well satisfied if he has an opportunity to make such a catch once a week during the season.—EDITOR.

A few days ago the warden arrested 2 swine for dynamiting Lost lake for trout. Lost lake is in the mountains above Creed, near timber line. The State stocked it a few years ago with trout. They have multiplied rapidly, and now they swarm. The swine had practised their dynamite game till they became overbold and were nabbed. They now lie in jail awaiting the next term of court. Will they get their deserts?

W. H. Nelson, Denver, Colo.

Spearing fish in the Niagara gorge is a favorite pastime in this vicinity. Almost any night the dim lanterns show men standing with spears ready for the fish that may happen to get into the eddies. In the spring large catches of sturgeon are made in this manner. The favorite ground is a place called Devil's Hole, about 3 miles below the falls. The average weight of the sturgeon taken at that point is 35 pounds.

A. E. Martin, Buffalo, N. Y.

I had often heard, since I came to this part of Wisconsin, that the Indians and old settlers believed that during July and August the muskalonge shed their teeth and rarely take bait in their mouths. I was fortunate enough to verify this curious fact last summer on Se-Se-bag-a-ma lake. We caught a muskalonge that had no teeth on one side of the jaw and those on the other side were so loose a slight pull detached them.

M. P. Barry, Rice Lake, Wis.

Have received the model B, automatic combination reel you had shipped to me from Yawman & Erbe, as premium for list of subscribers to RECREATION. After inspection of its working and of the new improvements I consider it absolute perfection, and the free running feature is what makes it so. I caught a small mouth bass, 21½ inches long and weighing just 5 pounds, in Looking Glass river, Mich. It is the largest bass of which there is record ever taken from that stream.

R. C. Pennington, Carey, O.

A brook trout weighing 2 pounds 9 ounces was recently taken from Lee brook, at Sheffield, Mass., by Charles Little, a promising young angler. He has quite a record for catching large trout. Lee brook is a beautiful stream, fed by springs and mountain brooks. It rises near the Connecticut line, runs North, at the foot of the Mount Washington range, and empties in the Housatonic river at Sheffield.

R. B. Lawton, Bridgeport, Conn.

One morning late in June Lee Crawford and I went bass fishing. At noon, after rebaiting our lines, which we left in the water, we sat down to find out what the women folks had given us for lunch. Lee had finished his share and was starting in on mine when he heard the humming of his reel. We ran to the shore and lifted his rod, only to find that the end of his line was in some bushes across the creek. We had caught a kingfisher!

A. H. Clinger, London, Ont.

December 9th, '99, I caught a pickerel weighing 2½ pounds, 22½ inches long. I was skating on the pond in Sanford when I saw the pickerel swimming under the black ice. I made a quick jump, right over the fish, and then cutting a hole in the ice with the toe of my skate, pulled the pickerel out with my hand.

RECREATION is the best periodical for sportsmen.

James Blore, Sanford, Me.

I have taken more fish in a day than you prescribe, but have always defended my greediness by the plea that as I could only fish once or twice a year, I was entitled to all I could catch on these rare occasions. Now, however, I am convinced that I was wrong. You are doing a good work, and I feel we ought to help you in every way we can.

Dr. C. E. Farnham, Grand Ridge, Ill.

On November 28th, 1898, Isaac Palmer, of Madison, Wis., caught in Lake Mendota, with rod and reel, a small mouth black bass that, when taken from the water, weighed 8 pounds, 10 ounces, and measured 24¾ inches in length and 17¾ inches in girth. As far as is known, this is the largest specimen of *Micropterus dolomieu* ever caught in America.

Does any reader of RECREATION know of a good lake or brook, that is worth fishing, within 30 miles of Boston? If so, please write me.

G. Bacon, 1775 Massachusetts avenue, North Cambridge, Mass.

We placed a large number of trout fry in the St. Vrain this year, and expect to make it as fine a trout stream as there is on the continent. The natural conditions are unsurpassed.

W. H. Phelps, Lyons, Colo.

The Bristol rod you sent me for 10 subscriptions is a beauty, and I am much pleased with it. It has already landed a 2½ pound lake trout.

C. A. Massey, Oshkosh, Wis.

Last August, as fish and game protector, I brought 2 fellows to justice for dynamiting fish. It cost one \$28 and the other \$48.

S. L. Warner, Lanesville, Ct.

There is an abundance of trout in all the lakes of Kootenai, and we expect fine sport this spring.

Dr. D. F. Hollister, Rathdrum, Idaho.

The prospects are good in this vicinity for a fine trout season.

F. M. Willson, Rome, N. Y.

GUNS AND AMMUNITION.

THE SAVAGE RIFLE.

Fair View, B. C.

Editor RECREATION:

I read your valuable magazine eagerly every month, turning first to the Guns and Ammunition department. I am greatly amused at the big and small bore cranks, and the varying and contradictory statements made by different writers. I first had a .44-40 which was a good, accurate little gun for its range. Then I got a .38-55, '94 model, which is about as good a rifle for deer as any man wants in any country. It has a great deal more force and concentration than most people give it credit for. I have shot deer with it at all distances up to 300 yards. At that distance it smashed a deer's back to atoms. I lately got round bullet moulds for it, put a little tin in the lead, and use about $\frac{1}{4}$ of the usual quantity of powder. It will only bore a round hole and will not tear the game. A more accurate shooter one could not get, at short or long range. I have a Lyman combination sight and can use either the white or dark sight. I have the usual buckhorn breech sight, and the Lyman peep sight in the rear. These make a perfect combination. I can use all 3 or only 2. I put the slide on the buckhorn down one notch, so it is out of the way in using the peep. If it is dusk I turn the peep down and raise the buckhorn up to the first 50-yard notch, which makes point-blank range. I reload my own cartridges, with entire satisfaction, and if it is properly done they are equal to the factory cartridges.

Having heard so much about the small bore smokeless powder rifles, I determined to try one. While in Vancouver a year ago I went to Mr. C. E. Isdall's gun store, where a large stock is kept of all the best makes in America and England. I selected a Savage, it being in my opinion the handsomest, most symmetrical and by far the best finished gun for the money. It is well balanced, and being hammerless, is a fine gun for horseback work or for boating and any bush work. There is nothing about it to catch on any projection. The magazine is a simple, strong and beautiful arrangement and perfectly safe and reliable. The rifle costs a few dollars more than the Winchester, but it is a beauty compared to one of the ordinary price and finish. Its shooting qualities are all that can be desired for either short or long range. The caliber is .303 British, and it will both bleed and kill. I have read some

funny stories in RECREATION about the effects of those bullets on game. The Savage is a deadly arm with the soft-nosed bullet. I see Mr. H. I. Hill, of Springfield, Mo., compares them to .32-40. I compare their effect on a deer to a .45-90 or a Martini-Henry, and the wounds on deer are all about the same up to 150 or 200 yards; but after that the superiority of the Savage appears, as the trajectory is so flat it is not necessary to raise any sights up to 250 yards, but to only take a full sight at that distance. The longest shot I ever made was at 300 yards. I raised the first leaf of my rear sight. The deer was standing corner on and I hit him about the middle of the neck. The bullet came out through the shoulder and smashed both it and the neck. I have shot 5 or 6 deer in different places, and never had one go over 100 yards. I have never seen a bullet after it hit a deer. They will pass through a deer from end to end and keep going. The shocking and paralyzing effect is great, and no man who has confidence in himself and is a good shot need be afraid of the biggest grizzly bear that ever walked, for a shot from a Savage will smash his head to atoms at short range.

One of my friends, who had a Martini-Henry, shot a bear last spring. It was coming down hill. When within 30 yards my friend took him just back of the head. The ball broke the bear's neck, passed down through the chest and lodged against the skin of the abdomen. Last month this friend sold the Martini and bought a Savage with a 22-inch barrel. A prettier, handier little gun for horseback work or prospecting could not be found. I fancy I see the big bore cranks smile at this. "A nice little toy," they will say; but as my friend is an old bear hunter and has seen what my Savage will do, he knows what he is doing. Tests made at long and short range proved very satisfactory with both the regular cartridge and light or miniature loads. This man has used many rifles, of different calibers, the .30-30 Winchester included, and he wants no more black powder guns. Some time ago I got a miniature reloading kit for my Savage, but have not had time to thoroughly test the gun at different ranges. Have shot a few grouse up to 30 yards. I have the same combination of sights as on the .38-55, and I think they are hard to beat, only my middle sight on the Savage is a 3-leaf folding sight. As most readers are aware, it is not the size of the bullet that

tears the largest hole in game. The velocity has more to do with it than the size of the bullet. A blue grouse shot with a miniature load of 5 grains of powder in a Savage rifle will only have a small hole through the body, while one shot with the regular cartridge with 30 grains of the same powder will be utterly torn to pieces and the parts will fly in different directions.

Mr. J. Irwin, of Bruce's Landing, B. C., claims those little bullets tear fur-bearing animals so badly that the fur is damaged. So far I can not see much difference in that respect from a .45-90 or a Martini-Henry. Deer will act differently, no matter what gun they are shot with. I have seen them run quite a distance with the heart shot to pieces, and I have seen them run a long way shot through from end to end, with the blood flying out of both ends at every jump. I have seen them, when shot through high up in the shoulder, sink in their tracks and never kick. I shot 2 deer as near the same place as possible, namely, within an inch of the tail. In both cases the bullet came out low down on the breast. They were both running up hill. The first I shot with the .38-55. That deer ran about 100 yards and lay down, bleeding profusely. When I came near it jumped up and ran about 200 yards, and again lay down, the place being bushy. I again started it and it ran another 150 yards. When I came within sight it was standing with its back humped. I was within 60 yards. I put a bullet through its lungs. It made 9 or 10 jumps and fell dead. The other I shot with my Savage, at about the same distance, namely, 80 yards. That one stopped instantly, but did not fall. It staggered around on the side hill utterly paralyzed. As it turned sidewise I fired again and broke its neck, not knowing certainly how badly it was shot at first. I judge from this that the great shocking and paralyzing effect of the Savage caused this deer to stop instantly, while the one shot by the .38-55, in exactly the same way, kept going. One deer appeared to be as badly torn as the other, but the meat near the hole made by the Savage was smashed soft, so it could be scraped off with the hand. It looked as if it had gone through a fine sausage machine and there was no fibre left near the course of the bullet. The other hole had jagged edges.

It is a wonder to me and many others that no rifle larger than a .303 and a .30-30 is made for high pressure powder. Most people would prefer one about .38 or .40 for big game. The Savage Arms Co. said, some time ago, they were going to turn out such a gun.

Fleming Robinson.

THE .30 ARMY FOR BIG GAME.

Three Rivers, Cal.

Editor RECREATION:

I am a constant reader of your official organ of the League of American Sportsmen and believe it to be doing great work all over the land. I notice, however, that some of your correspondents give the .30 caliber rifle a great calling down, and without any good reason whatever. They either write for the fun of it, or they have not yet been brought face to face with the facts concerning the shooting qualities of the .30 caliber. Every one knows all rifles do not shoot alike, even though they are of the same make. There is just as much difference between rifles as there is between human beings. All the American magazine rifles used in the army do not shoot alike. No 2 models of the Winchester Arms Company's make, or of any other make, shoot alike. Every man must find out how to shoot his rifle, at any known or unknown distance. A man should use \$5 to \$10 worth of ammunition in testing his rifle before he goes out to hunt.

He should also know what elevation to take for all ranges; how to get good shots at long distances; and how his rifle shoots in hot or cold weather, or in high or low altitudes. When shooting for practice, or to kill, always draw a long breath of air into the lungs and hold steady for an instant. When sighted on the object shoot. A few lessons will suffice. The breathing while taking aim is not steady. Every owner of a .30-caliber rifle that shoots the steel jacketed bullet ought to be proud of it, and should be prepared to handle it in as skillful a manner as possible. Otherwise he will not get good results. The old Springfield rifle won such a reputation in its day that it can never be wiped out of history; but the American magazine rifle used in the army of to-day surpasses it so much that it will penetrate metal where the old Springfield would only leave a leaded spot on the surface. I mention these 2 rifles because almost everyone knows what the former one did in years gone by, and every one knows what the latter is doing to-day. The Krag-Jorgenson is the ideal rifle to shoot, after a man once gets used to it. If I were going to buy a rifle I should certainly buy the Winchester 1895 model that shoots the .30-40 U. S. cartridge, with magazine underneath. It is not unlike the army rifle of to-day. I think it the pride of the Winchester Arms Co. With such a rifle I should not be afraid to stand face to face, or at any known or unknown distance, before the

largest or the wildest game that lives, because I know that rifle will do the work. If I want to fix some cartridges for hard cases I file a small cross on the point of the bullet, being careful not to file too deep. Let one of these strike a bear in the head and he is my meat. As for the steel jacketed ball, if I want game I go to places that other hunters would find hard to reach.

E. L. Barratt.

LARGE BORE RIFLES FOR HIM.

I have just been reading W. H. Borem's letter in April RECREATION. It is all right to jump on Grizzly Pete; he is an unprincipled scoundrel, and deserves all he gets. Borem claims to have hunted bear for 30 years and does not know that "sow" is the common name among trappers for a she bear. This proves he knows as little about bear as he does about guns. His comparing a .45-70 with a .30-30 reminds me of a green newspaper reporter talking about military arms.

Mighty few people seem to know that you can hit a man with the .45-70 as far as you can see him; that when it comes to accuracy the smokeless is not in it with black powder; and that the life of the smokeless barrel is so short that a year or 2 of use makes it worthless. I have a .303 that after 2 years' service cannot hit a barn at 800 yards, and a .30-30 that plants its bullets all over a 24-inch ring at 100 yards after one year's use. Both of these rifles have had good care.

I have also a .45-70 Sharps that first saw service 25 years ago, and I will shoot it at any distance up to 1,800 yards against any smokeless rifle ever made. Because a rifle kills a head of game dead in its tracks is no evidence that it is the best rifle. I shoot at game all the year round,* and know something about what a rifle will do. I have piled up a ton of meat in a heap with a .44-40,† but that is not saying the .44 is the only rifle in the world. No doubt the new rifles mark the beginning of a new era in firearms, but it is as yet only in its opening stage. Much must yet be done to make the new arms and ammunition equal to the old for hard service and reliability.

If Percy Selous ever happens to hit a deer in the heart when that organ is distended with blood I think it will drop in its tracks.

William Wells, Cora, Wyo.

ROUND BULLETS IN BLACK POWDER RIFLES

Y. M. A., in October RECREATION, wants to know about using small charges in a .50-95 Winchester express. He need not be afraid, when using small charges of powder, of having an air space in the shell, for the same quantity of powder as of air would exert a greater strain on the breech of the rifle. I advise him to use round balls for small game and general practice. When properly fitted they work splendidly in all black powder rifles. In the .22, not being able to get a mould to cast such a small round bullet, I used a single drop shot to each shell instead. The main point is to have the bullet a little larger than the caliber, so it will cut into the grooves. The proper size of round bullet is the outside diameter of muzzle of shell. The ball will then rest in mouth of shell without danger of sinking in. The moulds usually made for round bullets are too small; consequently they have not sufficient bearing on the rifling to be accurate, unless the powder charge is extremely small. American Deadshot powder answers admirably in all calibers. For .50-95 would load as follows: Forty grains Deadshot; then 2 sheets of light manilla toilet paper, rolled into wad and gently pressed down on powder. Then insert in mouth of shell a piece of grease a little larger than a hazel nut, and place bullet on top. Two or 3 taps with a light wooden mallet will make the bullet hold, without either driving it in or expanding the shell. Shells so loaded will with care work through a repeater magazine. They shoot well up to 100 yards, and don't smash small game. With such a load there is no perceptible recoil. When tapping the bullet see that the shell is not resting on anything hard.

Have had great success in squirrel shooting with round balls from a .32-40. I chanced to find some buckshot that was just the size. Loaded as I have described they were wonderfully accurate.

J. A. Varley, Toronto, Can.

OOM PAUL'S GUN.

Once I really enjoyed RECREATION. When I read of birds killed with a shot gun at 128 yards and bounding jack rabbits pierced with rifle balls at 400, I thrilled with pride and said: "Verily, our people can shoot a little bit, and surely there is none like unto us." But, alas, we are outdone! Our little exploits are as naught compared with the deeds of the doughty Boers. Now that I know the truth I turn from the puerile tales of Grizzly Pete & Co. as the boy in breeches spurns the nipples bottle.

The Boer of '81 was reputed the best marksman in the world. And, having read

*How is that? Do you pay no attention to game laws?
†What did you do with it? You certainly would not sell game?—EDITOR.

the papers, I can well believe it. This rugged worthy never carried over 4 cartridges, but with these he wrought wonders. He never shot anything under 500 yards. When he ran on game suddenly he backed off to the proper distance, and, presto! his quarry fell dead without a gurgle. And, remember, "the rifle of the Boers was an old-fashioned muzzle-loading affair." To quote from the daily press, that well of information undependable: "With this weapon at 500 yards a flying bird could be brought to earth with one shot.* * * At 700 yards the nimrods of South Africa could bring down a running buck. * * * When a single hunter was attacked by several Zulus or Kaffirs, he waited until they were within 800 yards; then he would shoot the foremost and have time to reload for the others before they could reach him. * * * Ten years ago Kruger could plant a bullet in the brain of a lion at 800 yards nearly every time, killing the animal instantly."

In view of the above, it is no wonder "the teeming multitudes of wild beasts have long since been cleaned out of the Transvaal." And now let the British lion beware, for Ooom Paul is after him with a smokeless gun!

M. B., Washington, D. C.

TELESCOPE RIFLE SIGHTS.

Brooklyn, N. Y.

Editor RECREATION:

Don Duncan, in May RECREATION, asks information from persons using telescope rifle sights. I use them and have found them a great aid in shooting. Several years ago I had my .22 short Winchester repeater fitted with a side-hanging sight.

By its use I have placed 50 to 100 consecutive shots in a target the size of a penny, at 20 to 25 paces. Have thrown objects in the air or rolled them on the ground and hit them with ease; and have used the rifle as a continuous shooter by holding the trigger back and operating it with the forearm slide, and made good targets.

It is a valuable aid in overcoming the habit of flinching which embarrasses so many rifle shooters. And the confidence inspired, as well as the pleasure felt in seeing your shots strike and locating them from the firing point without taking the rifle from your eye, is of incalculable value. I have my .303 Savage fitted with these sights, and for squirrel or small game shooting it is a great improvement. The .303 miniature and the black powder cartridge can be used with ease. But the gun is too light to overcome the recoil of the heavier cartridges, and injury to the eye might result from the use of the telescope. On all guns using light charges it is in-

valuable. I intend having one of my heavier rifles fitted, by way of experiment, with a telescope, and shall be happy to give my experience in its use.

On the front of my .22 caliber rifle I use the Lyman ivory front sight, No. 5; on the breech, Sigman's leaf, No. 6; and on the tang, Lyman's combination sight with disk No. 3. Then on the side I have my telescope sight; so I have all kinds of sights combined, and can test them without change of rifles.

E. E. Stokes.

ANOTHER MAN WHO LIKES THEM.

I have used a number of telescope sights of such well known firms as Cummings, Sidle, etc. A hunting trip without a 'scope would no longer be a pleasure for me. My rifles are a .30-30 Winchester, half magazine, take down, fitted with a 4 power 'scope, and a Stevens pocket rifle, 18-inch barrel, with same attachment. The telescope should be detachable and readily interchange to other rifles.

I have used the .30-30 on some big game and find its range almost unlimited. I have made a few shots so far away that I dare not tell the distance. Formerly I used a .45-90, but prefer the lighter caliber now. The .30 is an easier gun to carry, it has much longer range, flatter trajectory and greater penetration. Beyond this there is no advantage. I doubt if any man will say that a .30 would kill as quickly as a .45-90 with hollow point ball. I have certainly experienced the opposite.

One thing about the telescope I am now using should recommend it—its fine illumination. That enables one to use it in feeble and uncertain light, where open or peep sights would be useless. The field is also large, being about 380 square feet at 100 yards. It can be readily used on running game. I use the little Stevens as a bicycle rifle. It is extremely deadly on squirrels, frogs and any small game.

To the bird lover a powerful glass of some kind is almost indispensable, and makes the killing of birds for the purpose of identification entirely unnecessary. A careful scanning of a bird's prominent markings will serve to identify in nearly every case. A field glass is cumbersome and is never where you can get it in a hurry. A 'scope on your rifle barrel is just where you want it, and should the bird be a rare one the means of securing it are at hand.

Frederick W. King, Babylon, N. Y.

EFFECTIVE VOLLEY FIRING.

In answer to J. B. Pyrus' question in November RECREATION: Yes; I can name an instance in Puerto Rico where volley

firing was effective. Two regiments were to attack the town of Coamo, while 2 battalions of another regiment executed a flank movement. The first battalion below and about 700 yards from the Spanish embankment was in plain sight of the enemy and, of course, drew their fire. The second battalion, higher up and farther to the rear, commanded the situation, though its position was not known to the enemy, who supposed all the firing came from the other battalion. The Spanish officers, thinking themselves sheltered by the embankment from the fire of the American troops nearest them, rode up and down behind their men. Doing so, they became exposed to the fire of the hidden battalion, and each in turn was saluted with a volley. The commander fell with 17 bullets through his head, and most of his officers were killed in the same way; no one of them was fired at more than once. The distance was estimated at 1,000 yards, no range finders being used, and the shooting was done with smokeless powder.

Jay Bee, Eau Claire, Wis.

HIGH POWER RIFLES INACCURATE.

I had some experience with high power firearms during the Spanish-American war, and know that for accuracy they are not equal to any black powder rifle except, possibly, the .45-90, which shoots as wildly as a bell-muzzled shot gun. No high power rifles are fitted, like the .45-70 Springfield, with sights that will compensate the drift; for the reason, I suppose, that they do not drift twice alike. I can see no reason for using in the woods a rifle that will shoot 300 yards without changing sights. Nine-tenths of the deer killed here are shot within 50 yards. They cannot be hit nor even seen, ordinarily, at a greater distance, on account of the underbrush. A .44-40, with smokeless powder and full cased bullet, will shoot through any buck in Wisconsin, and open a large hole for him to bleed through. The bullet will not drop an inch in 75 yards. As for accuracy, everyone knows the best recorded score at 100 yards was made with a .44. On the plains, where long shots are the regular thing, it would be different, but here I will stick to the .44.

Jay Bee, Eau Claire, Wis.

SMALL SHOT.

My gun is a 12 gauge Ithaca hammerless, No. 2, \$60 list, Damascus barrels, 30 inches, full choke, drop of stock $2\frac{1}{2}$ inches.

I had it made to order. It is one of few of its kind. I had it built with 12 gauge barrels on a 10 gauge stock, barrels $\frac{1}{4}$ inch thick at breech. It weighs $9\frac{3}{4}$ pounds, but is so perfectly balanced I do not find

the weight burdensome. Stock delicately built, yet strong enough for any gun. It is an ornament to a parlor. Shooting qualities first class. I have killed ducks and rabbits at 60 yards with No. 6 soft shot. No. 8 shot will kill quails and other small game. I have put "B B" shot through 1 1-3 inch soft pine at 50 yards.

Before buying a gun look at the Ithaca. It will pay you.

Norman Peterson, Carpentaria, Cal.

These 2 remarkable scores of 10 shots each were made by Mr. Fred O. Young, of San Francisco, Cal., with a pistol, using Peters .22-caliber cartridges, loaded with King's semi-smokeless powder, on a 50-yard range, strictly off hand, Columbia target. The count in No. 1, the figures representing the diameter in inches, is: 3, 2, 4, 3, 3, 2, 4, 3, 2, 11—37, an average of 3.7 inches. In No. 2 it is: 5, 5, 3, 2, 3, 3, 4, 2, 3, 1—31, an average of 3.1 inches—just two points above the record for the target. Taking the first 9 shots of No. 1 and the last 8 of No. 2, Mr. Young's remarkable scores average 2.7 inches for the 17 shots.

• What results can be obtained by reloading Savage cartridges, and what are the best tools for the purpose? If some user of a Savage will please tell me I will be greatly obliged. I notice that the boom for the .30-30 still continues, and I would like to say to all users of small bores that I consider the Savage .303 as superior to the .30-30 as that is to the obsolete .45-60. I had a .30 before I got my Savage, and trials with both show the Savage has more penetration, lower trajectory, and 150 to 200 yards farther point blank range. I never think of raising my sights for shooting up to 600 yards. The Savage is handier, safer, lighter, and has fewer parts to take care of.

Ned Cady, Susanville, Cal.

I think both the .32-40 and the .30-30 more capable of wounding game than of killing it. F. E. D. says that no game hit fairly with a .30-30 can get away if the hunter knows his business. Maybe so; but how many rifle users know their business? How many are woodsmen? How many can trail a deer over hard ground? Those who cannot will get more deer with a .38-55, a .44-40 or, better than all, a .45-70-330. At the same time they will run less risk of killing some other hunter than they would with a .30. I hope I may never again hear of so many deer being wounded by small bore guns, only to be lost, as I did last fall.

Ammonoosuc, Littleton, N. H.

"Old Shooter" is too sweeping in his condemnation of the repeating shot gun. It is not the gun which makes the sportsman or the hog; but the spirit in which the gun is used. I use a Winchester repeater with great satisfaction, and in a decent way. Of course, if any man finds the ownership of a repeater conducive to a growth of bristles he would better exchange it for a double barrel.

Repeater, Coaticook, Ind.

Can more accurate shooting be done with Lyman combination sights than with factory sights? If I get a Lyman tang sight must I dispense with the factory front sight and get a bead sight? Is it advisable to get a cup disk with the combination sight? Must I take off the factory rear sight? Should the bead be held in the center of the globe, or at the bottom? Is the Lyman adjustable to various ranges?

.25-20, Alexandria, La.

H. R. P. asks about the Quackenbush rifle. I recently owned one, fitted with Lyman sights. It was a fine shooting little rifle. At 75 feet off hand I could put 10 shots in a 1½ inch circle, without any trouble, using .22 short cartridges. My next rifle will be a Winchester, model 1890, Lyman sights, for the .22 short cartridge. I think that is the handiest .22 caliber repeater made.

J. A. Wallace, Detroit, Mich.

In reply to the questions of G. R. Rucker, Checotah, Ind. Ter., would say: Repeating shot guns are lighter, more convenient to carry and can be fired more rapidly than double guns. Have used repeaters of 2 different makes, for 3 years. Never knew one to jam or to get out of order. I consider them perfectly safe.

Wallace Eddy, Petoskey, Mich.

I have a .32-40 which I load as follows: Ten grains of Dupont's shot gun smokeless powder, primed with about one grain of black powder; a round ball, slightly larger than interior of shell; and the shell wadded and greased as usual. The result is surprisingly satisfactory, and the shooting, up to 100 yards, is truly wonderful.

J. A. Varley, Toronto, Can.

In September RECREATION Mr. H. J. Hill asks what effect small bore rifles have on game when the bullet does not strike a bone. If Mr. Hill will write me I will send him a .25-35 bullet that killed a bull elk without touching a bone. The elk did not move 20 steps after being hit.

M. P. Dunham, Ovando, Mont.

Answering A. B. C., Grass Valley, Cal.: A 16 bore gun with 34-inch barrels will not carry farther than one with 30-inch barrels. It will, however, make a better pattern at a given distance. I prefer a 16 bore to either a 10 or a 12 for all around shooting.

C. A. Kindig, Medina, O.

If your readers will clean their rifles and shot guns after using and then wipe them out with a swab smeared with mercurial ointment they will never be troubled with leaded guns. The mercury in the ointment dissolves the lead, and the lard protects from rust.

Dr. W. P. Hartford, Cassville, Wis.

There is considerable difference in penetration between the Winchester .22 short and U. M. C. Co.'s .22 short. In shooting at an old kettle I found the U. M. C.'s would go through, while the Winchesters flattened on the surface.

L. O. Ingalls, West Durham, Me.

Will some one familiar with telescope rifle sights tell me if they can be used to advantage on dark, cloudy days? Can one lens be used for both long and short range shooting?

Otis Hoagland, Echoburg, Ill.

R. J. D. will make no mistake in buying a Remington semi-hammerless gun. They are all right. I have one with which, using No. 6 shot, I have killed squirrels at 70 yards.

A. B. Howe, Howes, N. Y.

Wishing to obtain a peep sight, but not to spend \$3 or so, I substituted a piece of flat, hard rubber with a pinhole in it, for the slide in my sporting rear sight, and it works admirably.

Ledoux Bringham, Alexandria, La.

August 9th Mr. Searles, of Marion, Ind., caught 4 muskalonge, weighing, respectively, 25, 16, 12 and 5 pounds.

W. B. K., Tomahawk Lake, Wis.

I should like to hear from the person who signs himself ".32-20 Crank, Drewsey, Ore."

Geo. W. Harp, Brisley, O.

Who manufactures the rifle called the "What Cheer"? Is it a reliable gun?

Subscriber, Warrensburg, N. Y.

NATURAL HISTORY.

A PLEA FOR THE BIRDS.

BULLETIN OF THE UNIVERSITY OF NEBRASKA.

The fact that insect depredations are increasing in extent each year makes it plain that something must be done to prevent it, and that quickly. We have found that although we are continually making increased efforts to destroy these pests, our efforts avail but little and the destruction of our crops goes on. What, then, is to be done?

The answer is plain. Heed the advice of the naturalist who has made a study of the life histories of the various other living creatures in the world. Do not condemn what he says without at least examining into it a little. In his desire for bird protection the naturalist is not prompted by sentiment alone; far from it! Although from the sentimental standpoint solely the friend of birds would have sufficient grounds for making such a request.

Briefly told, the economic relation of birds to man lies in the services which they render in checking the undue increase of insects, the devouring of small rodents, in destroying the seeds of noxious weeds and acting as scavengers on land and water.

Those who have studied the subject carefully have estimated that a loss of nearly \$400,000,000 is sustained annually by the cultivators of the soil from insect ravages in the United States and Canada. This does not include the damage done to ornamental shrubbery, shade and forest trees, nor to the grasses growing on our prairies. "But if insects are the natural enemies of vegetation birds are the natural enemies of insects."

"In the air swallows and swifts are coursing rapidly to and fro, ever in pursuit of the insects which constitute their sole food. When they retire, the night-hawks and whip-poor-wills take up the chase, catching moths and other nocturnal insects which would escape day-flying birds. Fly-catchers lie in wait, darting from ambush at passing prey, and with a suggestive click of the bill returning to their post. The warblers, light, active creatures, flutter about the terminal foliage, and with almost the skill of a hummingbird pick insects from the leaf or blossom. The vireos patiently explore the undersides of leaves and odd nooks and corners to see that no skulker escapes. The woodpeckers, nuthatches and creepers attend to the trunks and limbs, examining carefully each inch of bark for insects' eggs and larvæ, or excavating for the ants and borers they hear within. On the ground

the hunt is continued by the thrushes, sparrows and other birds that feed on the innumerable forms of terrestrial insects. Few places in which insects exist are neglected; even some species which pass their earlier stages or entire lives in the water are preyed upon by aquatic birds."

In nearly every case where the food habits of our birds have been studied we find the good done far exceeds the possible harm that might be inflicted by our birds. Allowing 25 insects a day as an average diet for each bird, and estimating we have about $1\frac{1}{2}$ birds to the acre, or in round numbers 75,000,000 in Nebraska, there would be required 1,875,000,000 insects for each day's rations.

Again estimating the number of insects required to fill a bushel at 120,000, it would take 15,625 bushels of insects to feed our birds for a single day, or 937,500 bushels for 60 days, or 2,343,750 bushels for 150 days. These estimates are low when we take into consideration the numbers of insects that various of our birds have been known to destroy in a single day. For example, the stomachs of 4 chickadees contained 1,028 eggs of cankerworms. Four others contained about 600 eggs and 105 mature females of the same insect. The stomach of a single quail contained 101 potato beetles; and that of another upward of 500 chinch bugs. A yellow billed cuckoo, shot at 6 a. m., contained 43 tent caterpillars. A robin had eaten 175 larvæ of bibio, which feed on the roots of grasses, etc.

Birds, like all other animals, feed on that food which is most readily obtained, hence the insectivorous kinds destroy those insects which are most numerous—the injurious species.

Estimating that there is a single grasshopper, katydid or cricket to each square yard of surface, it would require at least 650,000 bushels of these insects to cover the State. Not taking into account any of the myriads of other insect forms nor the rapid rate of reproduction which is going on among them, these alone would be nearly 1-3 enough insect food for our birds during the year. This being true, it is plain that at least twice as many birds could find the proper insect food in our State each year.

A perusal of the various works that have been written on the economic relations of birds to man will support the statement that if we were deprived of the services of birds the earth would soon become uninhabitable.

In addition to the actual good that birds do in the destruction of noxious insects, many of them are engaged for at least $\frac{1}{2}$ of the year in hunting out and devouring the seeds of various weeds and other, to us, useless plants. Such is the mission of the various sparrows, snowbirds, finches and longspurs which often occupy our fields in flocks of thousands during the winter months.

If, after ascertaining such truths as the above regarding birds, we continue to slaughter them, it is not due to thoughtlessness on our part. We do it wilfully and maliciously. The schoolboy may thoughtlessly rob a bird's nest or kill a bird or 2. It is the duty of teacher and parent alike to teach him better, to show him how wrong it is to destroy life uselessly. It is especially their duty to prevent the destruction of birds. If each schoolboy in Nebraska were to rob a nest of, say, 5 bird's eggs, what would be the result? Yet the making of bird-egg collections is getting to be such a fad that almost every boy enters into it more or less zealously at some time or other. Some single collectors in a single season take 500 or more eggs. This should be stopped. We can study birds and their nests without destroying either. A live bird is more interesting than a dead one. An egg left in a nest where it will in due time become a live creature is of more interest than an empty eggshell.

We, as citizens of the United States, pride ourselves on being highly civilized and humane. We also claim to be intensely practical and businesslike in everything. Are we?

THE CAPACITY OF A KING.

In February, 1898, number of RECREATION I read with interest W. H. Gaddis's snake and rat story. Twenty-five years ago, while constructing the Santa Fe canal, I made collections of reptiles for the Smithsonian Institution and private parties. Mr. Gaddis's account of the swallowing capacity of snakes reminded me of something I once saw. I had 2 boxes made with glass on one side and wire screens on the other. I put one of these boxes on top of the other, with a hole in the middle of them, and a post in the lower box so snakes could pass up and down. In these boxes I had 2 snakes that were called at that time corral snakes. They are now known as the deadly poison American cobra. Each was about 2 feet long. I also had one blow adder, or, as we know him here, 'possum snake. He was about 2 feet long; and there was a rusty, stub-tail water snake $3\frac{1}{2}$ feet long. One morning I picked up a 5-foot king

snake, carried him into the house and put him in the lower box, where the rest were. Before he had half of his length in the box he had one of the cobras by the tail. All of the snakes were hustling to gain the upper box. They swarmed up, but the little cobra got 3 turns around the post before the king had him taut. Then came the tug. The cobra strained to get turns, or coils, on the post, and the king gradually swallowed him. Before the king closed up to the post the cobra had gained 2 more coils around the post, making 5, or about half his length. The king's nose was up to the post, where he pulled until he broke the cobra's skin and tore it off nearly around his body. This hurt so the little fellow let go 3 turns and struck the king several times. The king kept on pulling and swallowing until he pulled off the last coil, when the cobra hooked about 2 inches of himself on one side of the king's mouth, and thus stopped progress for quite a while. At last the king got a purchase against the post and pulled back, getting about an inch more of the cobra out of sight. Then he rubbed him against the wire screen until he absorbed him. In 5 minutes the king snake was up above and had the blow adder by the head, partially swallowed him and backed down, finishing him below. A call to dinner took us away. When we returned, about 8 o'clock, the king was in the upper box with the other cobra about half swallowed, and the water snake was in the lower box, coiled up in one corner. At dark that night there were 2 snakes, the king in the upper box and the water snake below. At 5 a. m. I had only a good sized king snake, coiled up in the lower box. I have seen snakes gobble almost any small thing, even a turtle shell as large as a silver dollar, and I never saw but one try more than he could accomplish. That was a water snake with a bream, head first. The bream was at least 4 inches wide, and the snake was not more than 2 feet long. He lay under water, in plain sight, on a sandy bottom, nearly 24 hours, trying his best, but could get no farther up than the eyes of the fish.

D. C. Barker, Sanford, Fla.

MIGRATIONS OF THE PURPLE MARTIN.

C. C. HASKINS.

This year one of Chicago's North Side parks was chosen by the purple martins of the vicinity as a rendezvous prior to their annual migration. This curious custom of the bird, *Progne purpurea*, is interesting. For several days before their final departure they congregate in one flock in some selected spot, and will not be driven away. They roost together, scatter during the day, but return at evening for several days in succession, until the day of de-

pasture. Then they leave in the early morning and are seen no more until the next year.

I knew of one of these conventions in Southern Indiana. The place selected for the purpose was the roof of the court house. That proving too small to hold the flock, the overflow covered several roofs, eaves, chimneys and porches in the neighborhood. For several evenings the multitude increased, and made more noise than a political convention. This lasted about a week, when, with a great final chattering, they rose at break of day and were gone to their Southern homes.

The martin is a fighter and drives off the sparrow when both desire the same nesting place; but I saw this year, for the first time, martins and sparrows peacefully occupying different apartments in the same bird house. The martin, like his cousin, the kingbird, is said to prey on honey bees when opportunity offers. I do not know about martins, but I have watched kingbirds while they were bee hunting. Have seen one light on a hive or quite near it, while working bees came and went without the least recognition on the part of either; but let a drone, who has no sting, venture out, and the bird would have him in short order.

I notice in a recent RECREATION that one of its nimrod correspondents has been wasting powder on coween ducks. These birds used to be extremely plentiful in the winter, in the Niagara river, especially in the lower part, and were then in their fullest plumage. The French boys used to shoot them for the feathers. Between Queenstown and Lewiston, just below the new bridge, the river widens considerably, and eddy currents form on both shores, where the water is shallow. Into these eddies the flock, 40 or 50 sometimes, would drop, and after long speeches made up of sentences like "owee-owakeen, owee owakeen," one would up end and go down, and all would follow suit. Then the *bois brule* would paddle his canoe post haste to the spot and wait for the rise. As the birds came up there was a delay of $\frac{1}{2}$ second or so before they could take wing, and it was a rare thing if the bird aimed at flew more than 20 feet before he fell.

HUNTING WILD BEES.

In a recent number of RECREATION some one asks how wild bees may be traced. I have hunted bee trees for several years and perhaps can give the desired information.

The time to successfully bait bees is immediately after the first frosts in the fall. I take a box 4 inches square and 3 inches deep and place in it 2 or 3 inches of empty

honey comb. Then pour into the cells until they are half full a thin syrup made of white sugar, to which a few drops of oil of anise have been added. Bees fill up much more quickly on the thin syrup than they would on honey.

Go early in the morning to some flower patch where the bees have been feeding. Capture the first bee that shows up and put him in your box. He will at once load himself with syrup. Place your box on a high stump or fence and get below, so you can see it against the sky. When the bee is loaded he will come out and, after several circles around the box, dart away—the devil only knows where. However, in 5 or 10 minutes he will return and bring one or 2 friends. After a few trips the bees will have become well acquainted with the route and will make a straight line for their tree. It is then an easy matter to follow them and locate your first line.

By this time you will have plenty of bees; close the box while a few are in it and carry it $\frac{1}{4}$ to $\frac{1}{2}$ mile to one side. Let the bees out and await their return. In a short time you will have a second course or line. Where the 2 lines cross is where you will find the tree. Bees usually go into a hollow green tree, but sometimes are found in old stumps. In Colorado we find them in the rocks.

Bee hunters find field glasses useful in examining tall trees. It is almost impossible to course bees from flowers; neither will they take bait while there are flowers to feed on.

Sam Stevens, Cripple Creek, Col.

ANOTHER SINGING MOUSE.

In November RECREATION Mr. Harry E. Loftie, of Syracuse, N. Y., says he has a singing mouse, and asks if there are any other singing mice in existence. Although not mentioned by Buffon, no doubt can be entertained that music is a faculty, if not one of the accomplishments, of those little rodents, rendering it highly probable there are many sweet singers among them, though their music may never come to the attention of man. More than 60 years ago I was extremely fond of dogs and of hunting the sly raccoon after night. In the still darkness, while waiting in the forests for a report or the return of the dogs, I would occasionally hear a sweet, canary-like music, coming from somewhere near. The trill and twitter notes were at variance with the song of any birds I knew. My curiosity was awakened. In 1875 my housemaid reported a mouse which came out every day, sat on the window sill in the kitchen, and sang an hour or more. She was requested to give notice when the musician came again. The next day she

called me and I saw a mouse sitting half erect singing even more sweetly and continuously than a canary bird or any of the known warblers. It was the same mysterious music I had heard many years before, but not until then had I seen the musician. He sang every day about 3 o'clock in the afternoon, and was scarcely ever without an audience. He seemed to understand he was safe and would allow us to come close to him. Orders were given for his protection, but in a few months he was missing.

It is probable all the varieties of mice are musical, but our opportunities for knowing it are limited. A mouse which has courage to exhibit his ability to an audience of merciless enemies is truly a living curiosity.

Nelson E. Jones, M. D., author of the *Squirrel Hunters of Ohio*, publisher of the *Nests and Eggs of Birds of Ohio*, etc., Circleville, Ohio.

THE JUMPING MOUSE.

We have here in Jersey, along the banks of a certain brook, a strange mouse, concerning which I should like some information. Few people here seem to know of it, but such as do call it the kangaroo mouse. I have never seen it except in the immediate vicinity of that one brook. I have often found these mice in the maws of pike or frogs, hence they must go in the water frequently and voluntarily. I have also seen them dead on the railroad where it crosses that brook. A friend offers the explanation that the rails hold the heat of the sun some time after sunset and the mice crawl on them for the warmth they give. This same friend has an apple orchard which was planted with ground apples, a coarse grass, on the roots of which grow small, hard kernels. He tells me the part of the orchard near the brook is a complete network of burrows made by these mice, undoubtedly for the kernels as food. As nearly as I can remember, this mouse is about the size of an ordinary house mouse or perhaps a little larger. Its color is like that of a house mouse, with a little more red fur on it. It has long hind legs, on which it squats in much the same manner as the kangaroo; a thick, tapering tail, long ears, and big eyes. With its long hind legs and strong tail it moves, when frightened, in long leaps like a kangaroo, hence its name. I can find nothing like it in my little *Natural History*, and the nearest approach in the *Museum of Natural History*, New York, is the California jumping mouse; though I could only compare from memory.

Wm. H. Franklin, Hightstown, N. J.

ANSWER.

The animal you refer to is undoubtedly the well known jumping mouse of North America, which inhabits nearly the whole of North America, in wooded regions, nearly to latitude 62 degrees. Its scientific name is *Zapus hudsonius*, and it is the only one of its genus in North America. The head and body is about 3 inches long, and the tail about 4½. In winter it hibernates and becomes perfectly torpid in the nest, which it forms underground. It is one of the most interesting of all the many members of the mouse family.—EDITOR.

NATURAL HISTORY NOTES.

Your correspondent, Mr. L. L. Bales, of Juneau, Alaska, is certainly at fault when in the November number of *RECREATION* he describes the ptarmigan eggs as being pure white. In the U. S. National Museum's large series of ptarmigan eggs, of the different species, there are but 3 pure white eggs, and it is unnecessary to say they are abnormal. The white-tailed ptarmigan, *Lagopus leucurus*, lays the lightest colored eggs of any of the group, and they are a vinaceous buff, moderately spotted over the entire surface with small spots and freckles of a reddish brown, more or less intense in the different sets. The eggs of all the other species which I have ever seen have either a white or a buff ground, thickly spotted and blotched with dark, deep brown, varying to nearly black, and in some cases nearly obscuring the ground color. There are certainly more than 2 species found on the mainland of Alaska, as the white-tailed ptarmigan, *Lagopus leucurus*, occurs in addition to the 2 enumerated by Mr. Bales.

J. H. Riley, United States National Museum, Div. of Birds, Washington, D. C.

I happened to be in the Rainy river district of Western Ontario in the spring and summer of 1899. Toward the end of May I found the nest of a ruffed grouse, and being interested in nature I watched the nest for a time. Returning the next day, I noticed a number of eggs scattered around the nest and wondered what the cause was. The bird happened to be away, so I put the eggs back in the nest. The next day I went back to see the nest again. I stole up to the foot of the pine tree and there saw a red squirrel breaking and eating one of the grouse eggs. Other eggs were scattered on the ground; others were broken. I went up to the nest and the squirrel ran up the tree. I picked up the remaining eggs and found them as cold as ice. The bird must have left the nest the day before, when the eggs were first scattered.

A. D. W., Ripley, Ont.

I take exception to parts of Dr. G. L. Wood's statements in the January number of your magazine. As he did not give his address I take this means of communicating with him. Evidently he does not agree with the views expressed in my article in the same issue. If he will write me his address I will try to convert him on the subject of bounties on hawks and owls. He ought to move to the town of North Stonington, where they still retain that barbarous law. I should like to lend him my copy of Fisher's report on the examination of the stomachs of hawks and owls, if he cannot get a copy himself, and a brief statement of my own finding in similar cases. Protect these birds, I say. I hope RECREATION will echo my sentiments and try to place these noble birds on the safe side of the law, along with the redbreasts.

Lorenzo Blackstone, Norwich, Conn.

Many people are slow to learn. Americans have been taught, for a hundred years, that all hawks and owls should be killed, and it is hard for them to believe the new evidence. Keep at it, Brother Blackstone, and all men will learn wisdom in time.—
EDITOR.

As I was working in the field one day last summer I noticed a blackbird chasing something, occasionally picking it up and shaking it. At last I saw that the victim was a mouse. The blackbird kept on pecking it until it was nearly killed; then picking up the mouse in its bill it flew off, followed by a number of its own kind, anxious to get a taste of the dainty morsel. As the bird flew along at a good rate of speed the mouse suddenly dropped from its bill and fell to the ground. The blackbird flew some distance past before it could stop. Then it picked up the mouse once more and flew off. The same thing was repeated several times. Is this a common occurrence?

H. H. Berkeland, Roland, Ia.

I like your editorial in November RECREATION regarding the use of correct names. The sooner a stand is taken in this matter the sooner will people become informed regarding the correct names of birds and animals. Our magazines and newspapers constantly use such names as pheasant, hedgehog, coon, bobcat, black-tail deer (for mule deer), and hundreds of other similar inaccuracies. Correct names would sound much better and no one could be misled regarding the identity of the bird or animal mentioned. RECREATION is the best sportsmen's journal in the United States.

Isador S. Trostler, Omaha, Neb.

It is my opinion, formed after many years of careful observation, that the blue jays destroy more of our song birds than all other vermin combined. Probably every live jay represents 10 dead song birds. I have seen a jay attack and kill a half-grown dove. It is true a pair of robins will whip a jay, but if the blue sneak once gets to their nest, goodbye eggs or young robins. In this part of Kentucky jays have greatly increased and song birds have decreased. I notice that the large fox squirrel is on the increase here also. We have no red or black squirrels.

G. S. Judd, Maysville, Ky.

Last August a man living 3 miles above here brought me the body of a dead peba, or armadillo, *Novemcinctus*, which he had found on his farm.

This is the first time I ever heard of one being found North of Texas. It was full grown, and how the mischief did it get 'way up here in Kentucky?

G. S. Judd, Maysville, Ky.

ANSWER.

It probably escaped from some circus, or menagerie, or private individual. As far as I know, the armadillo has never come North of Texas, of its own accord.

The gray squirrels in Ulster county, New York, ate but few nuts last fall, but ate liberally of dead wood. Is not this an unusual diet? Can it be that some disease or parasite has got into them, and that their animal instinct prompts them to adopt this diet to rid themselves of it, supposing there is some property in the wood which would kill or drive off the pest? I have never before heard of this in grays, although it is possibly natural.

B. F. Cogswell, Jr., Flatbush, L. I.

Having read in RECREATION of dogs rolling in carrion, and having seen them do it, I can add another animal to the list, which I have not seen mentioned, and that is a black bear. I have a cub about 4 months old to whom I gave some cooked fish that had been left over from supper the night before. Instead of eating it he took it out of the pan and began to roll in it, rubbing his head and shoulders the same as I have seen dogs do.

Jas. W. Nicol, Moore, Wash.

I like RECREATION and am in perfect sympathy with the cause it represents. I think you are too rough on the quadruped from which we get our ham and bacon. Don't you think it would be as well to call hunters with slaughter house proclivities Webbers instead of hogs? You see, hogs have their uses; but call a man a Webber and he would hunt a hole mighty quick.

D. Van Blaricom, Victor, Mont.

THE LEAGUE OF AMERICAN SPORTSMEN.

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Applications for membership and orders for badges should be addressed to Arthur F. Rice, Secretary, 23 W. 24th St., New York.

LOCAL WARDENS IN NEW YORK.

County.	Name of Warden.	Address.
New York,	Conrad L. Meyer,	46 W. Broadway.
Livingston,	M. De La Vergne,	Lakeville.
Nassau,	Willett Smith,	Freeport, L. I.
Albany,	C. D. Johnson,	Newtonville, N. Y.
Allegany,	J. D. Holden,	Belmont, N. Y.
Broome,	M. A. Baker,	Whitney's Point, N. Y.
Cayuga,	H. M. Haskell,	Weedsport, N. Y.
Cortland,	J. A. Wood,	Cortland, N. Y.
Chemung,	Fred. Uhle,	Hendy Creek, N. Y.
Erie,	E. P. Dorr,	103 D. S. Morgan Building, Buffalo, N. Y.
Essex,	Marvin H. Butler,	Morilla, N. Y.
Franklin,	W. H. Broughton,	Moriah, N. Y.
Montgomery,	Jas. Eccles,	St. Regis Falls.
Oneida,	Charles W. Scharf,	Canajoharie, N. Y.
Orange,	E. J. Breeze,	Forestport, N. Y.
	Wilson Crans,	Middletown, N. Y.
	J. Hampton Kidd,	Newburgh, N. Y.
Rensselaer,	Capt. J. B. Taylor,	Rensselaer, N. Y.
Richmond,	Lewis Morris,	Port Richmond, N. Y.
Schenectady,	J. W. Furnside,	Schenectady, N. Y.
Suffolk,	F. J. Fellows,	Islip, L. I.
	P. F. Tabor,	Orient, L. I.
Tioga,	Geo. Wood,	Owego, N. Y.
Washington,	C. L. Allen,	Sandy Hill, N. Y.
Westchester,	George Poth,	Pleasantville, N. Y.
Essex,	H. E. Braman,	Keene Valley, N. Y.
Rockland,	A. Woodward,	Ramapo, N. Y.
Sullivan,	Ernest W. Kenne,	Mongaup Valley, N. Y.
Dutchess,	A. B. Miller,	Jackson's Corners, N. Y.
Columbia,		Sanataria Springs, N. Y.
Broome,	John Sullivan,	Port Jervis, N. Y.
Orange,	Thomas Harris,	Madrid, N. Y.
St. Lawrence,	J. W. Aitchison,	Memphis, N. Y.
Onondaga,	James Lush,	Penn Yan, N. Y.
Yates,	B. L. Wren,	Pawling, N. Y.
Dutchess,	Chas. H. DeLong,	Billings, N. Y.
Dutchess,	Jacob Tompkins,	

LOCAL WARDENS IN OHIO.

Stark,	A. Dangelesen,	Massillon.
Franklin,	Brook L. Terry,	208 Woodward Av., Columbus.
Cuyahoga,	A. W. Hitch,	161 Osborn St., Cleveland.

County.	Name of Warden.	Address.
Clark,	Fred C. Ross,	169 W. Main St., Springfield.
Erie,	David Sutton,	418 Jackson St., Sandusky.
Fulton,	L. C. Berry,	Swanton.
Allen,	S. W. Knisely,	Lima.
Hamilton,	W. C. Rippey	4465 Eastern Ave. Cincinnati.
Knox,	Grant Phillips,	Mt. Vernon.
Lorain,	T. J. Bates,	Elyria.
Ottawa,	Frank B. Shirley,	Lakeside.
Muskingum,	Frank D. Abell,	Zanesville.
Scioto,	J. F. Kelley,	Portsmouth.
Highland,	James G. Lyle,	Hillsboro.

LOCAL WARDENS IN CONNECTICUT.

Fairfield,	George B. Bliss,	2 Park Row, Stam- ford, Ct.
	Harvey C. Went,	11 Park St., Bridge- port, Ct.
Hartford,	Abbott C. Collins,	783 Main Street, Hartford, Ct.
(County Warden, care Conn. Mutual Life Ins. Co.)		
Litchfield,	Dr. H. L. Ross,	P. O. Box 100, Can- naon, Ct.
New Haven,	Wilbur E. Beach,	318 Chapel Street, New Haven, Ct.

LOCAL WARDENS IN NEW JERSEY.

Mercer,	Jos Ashmore,	124 Taylor St., Trenton
Middlesex,	D. W. Clark,	New Brunswick.
Morris,	Joseph Pellet,	Pompton Plains.
Morris,	Chas. W. Blake,	Dover.
Morris,	Francis E. Cook,	Butler.
Passaic,	L. M. Lefevre,	Pompton Plains.
Somerset,	G. E. Morris,	Somerville.
Sussex,	Isaac D. Williams,	Branchville.
Union,	A. H. Miller,	Cranford.
	C. M. Hawkins,	Roselle.
Warren,	{ Jacob Young, Reuben Warner, }	Phillipsburg.

LOCAL WARDENS IN PENNSYLVANIA.

Venango,	G. D. Benedict,	Pleasantville.
Northumberland,	W. A. Reppard,	Shamokin.
Potter,	Byron Bassett,	Coudersport.
Crawford,		
(West half)	Jasper Tillotson,	Tillotson.
(East half)	Geo. T. Meyers,	Titusville.
Cambria,	W. H. Lambert,	720 Coleman Ave., Johnstown.
Beaver,	N. H. Covert,	Beaver Falls.
McKean,	C. A. Duke,	Duke Center.

LOCAL WARDENS IN MICHIGAN.

Kalkaska,	W. H. Dunham,	Kalkaska.
Kalamazoo,	C. E. Miller,	Augusta.
Sanilac,	W. D. Young,	Deckerville.

LOCAL WARDENS IN WYOMING.

Freemont,	Nelson Yarnall,	Dubois.
Uinta,	{ S. N. Leak, W. L. Simpson, }	Jackson.
Carbon,	Kirk Dyer,	Medicine Bow.

DISCOUNTS TO LEAGUE MEMBERS.

The following firms have agreed to give members of the L. A. S. a discount of 2 per cent. to 10 per cent. on all goods bought of them. In ordering please give L. A. S. number:

Syracuse Arms Co., Syracuse, N. Y. Guns.
Davenport Fire Arms Co., Norwich, Conn. Shot
guns, rifles.
Gundlach Optical Co., Rochester, N. Y. Photographic
goods.
Blair Camera Co., Rochester, N. Y. Photographic goods.
Folmer & Schwing, 271 Canal Street, New York City.
Photographic goods.
The Bostwick Gun and Sporting Goods Co., 1528
Arapahoe St., Denver, Col.
W. H. Langdon, Bridgeport, Conn. Sportsmen's
goods.

New York Condensed Milk Co., 71 Hudson Street,
New York City. Condensed products.
Oneida Community, Kenwood, N. Y. Traps.
Metz & Schloerb, Oshkosh, Wis. Moccasins, hunting
shoes, etc.
Novelty Cutlery Co., Canton, O. Pocket cutlery, ink
erasers, etc.
Gun Bore Treatment Co., 7 & 9 Warren St., New
York City.
Willis Arms & Cycle Co., Kansas City, Mo. Bicycles,
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Percy Selous, Greenville, Mich. Naturalist and
taxidermist.
Robt. H. Ingersoll & Bros., 67 Cortlandt St., New
York City.
W. L. Marble, Gladstone, Mich., Safety Pocket Axe.
Pneumatic Mattress & Cushion Co., Reading, Mass.

CONGRESS TO AID THE STATES.

Hon. John F. Lacy, member of Congress from Iowa, has introduced one of the most important bills for game protection ever presented to that or any other legislative body. It is known as House Bill No. 6,634, and provides that the Secretary of Agriculture may engage in the propagation and distribution of such game birds and other wild birds as he may deem suitable for this purpose. It also authorizes the Interstate Commerce Commission to prohibit the shipment from one State to another of game killed in violation of the laws of any State, or which may be delivered to any common carrier for shipment out of a State having a non-export law.

This bill does not, however, aim to prohibit the shipment of any bird or animal for scientific purposes.

Mr. Lacy has also introduced another bill, known as House Bill No. 6,062, which authorizes the Secretary of the Interior to lease for a term of 20 years, to the Hon. John C. Jones, better known as "Buffalo Jones," a tract of desert land in Southeast New Mexico for use in perpetuating the American bison. This lease is to be on condition that Mr. Jones shall fence a sufficient portion of the tract and place therein 100 buffaloes—50 male and 50 female—and that he shall care for same properly, giving to the government 5 pairs of the animals each year during the term of the lease, for government parks or zoological gardens elsewhere.

It is of the utmost importance that both these bills should be passed at the present session of Congress. It therefore becomes the plain duty of every member of the L. A. S., and every other person interested in the preservation of game and of song and insectivorous birds, to write to his representatives in both houses of Congress, urging prompt and favorable action on these bills. Not only is it the duty of all such persons to write such letters, but to induce all their friends to do so, whether such friends be sportsmen or not.

Strong opposition to the passage of the bills is certain to develop, for various rea-

sons, and it simply becomes a question with each representative in Congress as to what action on his part will best serve the interests of his constituents.

It is not necessary that this League should use any money for the purpose of securing the passage of these bills. I shall personally spend a good deal of time in Washington during the winter, giving careful attention to them, at my own expense. It simply remains for each member of the League, and for all other friends of game and song bird protection, to expend a few hours of time and a few cents in postage to aid in the work.

Let every member do his duty in this matter. Write your senators and representatives *at once*. Do not delay this matter until to-morrow. Act TO-DAY.

SOME OTHER THINGS THE LEAGUE HAS DONE.

John Eakright, a police officer and local warden of the L. A. S. at Kalispell, Mont., recently arrested 2 Indians, named Looking Glass and Gorsta, for catching trout with a grab hook, in violation of law. The redskins were tried before Justice M. J. Sullivan, of the same place, and each fined \$25 and costs. Not having that amount of loose change about them, they were sent to jail.

Wilbur E. Beach, deputy sheriff and local L. A. S. warden at New Haven, Conn., recently arrested C. J. Nelson and Joseph Duncan, of East Haven, for killing robins and other small song birds. Nelson had in his possession 7 birds and was fined \$7 and costs. Duncan had 2 robins and was fined \$2 and costs, the total fines and costs amounting to \$22.25 and \$17.25, respectively. The accused paid their fines and went away, sadder but wiser men. They will probably not kill any more song or insectivorous birds. Neither will their friends.

And thus the good work goes on. There is not a month in the year, and scarcely a week, that some League warden does not arrest and convict a man for violation of a game or fish law. If all the sportsmen of the country who are clamoring for game protection and game propagation would join the League and help us to extend our system of wardenship into all counties and townships, we would soon stop all violations of these laws. Did you ever think, gentle reader, of your duty in this matter? Are you not willing to contribute \$1 a year to such a vast and efficient system of game protection as the L. A. S. supplies? Why not send in your dollar now?

LEAGUE NOTES.

I have decided to offer RECREATION to members of the L. A. S. at 50 cents a year. Anyone who has any knowledge of the

publishing business will readily understand that it costs me more than \$1 a year to print and send RECREATION to each subscriber. Yet I am anxious to see the League grow rapidly, and am therefore willing to furnish the magazine at less than *half the actual cost* as an additional inducement to sportsmen to join. No true friend of game protection should require such an inducement; but unfortunately there are thousands of people who always ask, "What do I get out of it?" Here is what you can get out of it, in addition to the satisfaction of knowing you are contributing \$1 a year to the great cause of game preservation. This offer relates to renewals as well as to new subscriptions.

The local branch of the League of American Sportsmen has received from the Pleasant Valley hatchery, in Steuben county, 1,000 brook trout fingerlings that averaged about 2½ inches in length.

A committee of the local branch, accompanied by the superintendent of the hatchery, who came with the fish, placed them in a suitable stream in this vicinity.

The local branch intends to supplement this by placing 1,000 black bass fingerlings in the Mohawk next June and will continue this kind of work until all the streams in this vicinity are well stocked with game fish.

This shows what a local chapter of the L. A. S. can do when composed of hustlers. Why don't you organize a chapter in your town? I mean YOU, my good reader.—EDITOR.

Chief Warden A. W. Van Saun, of New Jersey, sent the following notice to one of his local wardens:

Mr. L. M. Lefevre, Pompton Plains, N. J.

Dear Sir—You are hereby notified that I have this day revoked your commission as a local warden of the League of American Sportsmen, for conduct unbecoming a warden and a true sportsman interested in the protection of fish and game. Yours truly, A. W. Van Saun, Chief Warden.

The executive committee of the L. A. S. has adopted a resolution authorizing the secretary to make a present of a gold badge to each member who will pay his membership fee 10 years in advance. Now if you want one of these beautiful emblems, send in your \$10.

Mary had a little lamb,

Whose legs to Wall street took him;

There he was so badly shorn

That Mary up and shook him.

—Cleveland Plain Dealer.

He—What a pretty girl! She looks sweet enough to eat.

She—Of course; and that's just what she does 3 or 4 times a day.—Chicago News.

EDITOR'S CORNER.

RECREATION desires to be of the greatest possible service to its readers in every way. You are therefore invited to ask this office for any information you may want, on any subject whatever. If I cannot answer directly, I will endeavor to get the information, and reply at the earliest possible moment.

More especially if you are planning a hunting or fishing trip anywhere in the United States, Canada, or Mexico, let me know and I will tell you all that can be learned about the fish or game to be found in any such region, and as to the best means of reaching your objective point. In nearly every case, I can put you in correspondence with subscribers who live in the district in question.

If you do not see what you want, ask for it.

A GAME DEALER IN TROUBLE.

August Silz, a game dealer at 85 Barclay street, was arrested a few days ago, on the complaint of an officer of the League of American Sportsmen, for selling game in close season. Silz was arraigned before Justice Crane, and on examination was held for trial in the Criminal Court. District-Attorney Gardiner has taken charge of the case. He will be assisted by J. H. Seymour, the League attorney, and we have employed, as special counsel, the Hon. John S. Wise. The case will be called for hearing in General Sessions at an early date, and will be stubbornly fought.

Silz claims he has not violated the law, inasmuch as the deer and quails which he had in possession were imported from Europe. The League attorneys, however, insist that this is a violation of the law, inasmuch as the statute simply provides that deer and quails shall not be sold or had in possession except during the open season for killing same in this State, and makes no exception as to whether killed in or out of the State. It is understood that Silz is backed by the Game Dealers' Association, and that the case will be carried to the Appellate Court, no matter which way it may go in the Criminal Court.

All game dealers and hotels in this city were cautioned a year ago against selling even imported game, and, so far as known, they all discontinued the trade at that time. Silz, however, more venturesome than the others, began the importation of game this year.

Three officers of the League visited his place of business and found displayed there 10 carcasses of deer and 29 quails. If

the case goes against him in the Criminal Court he will then be liable to the State on a civil action, and the penalty in that case will be \$100 on each carcass of venison. The League has determined to make a test case of this, and if it succeeds in the present criminal prosecution will immediately begin a civil action against Silz.

DIFFERENT KINDS OF GOVERNORS.

Governor Roosevelt, in his annual message to the New York Legislature, has given that body some pointed suggestions as to the need of prompt measures for preserving the game, the game fishes, and the forests of this State. The Governor says:

Under this commission great progress has been made through the fish hatcheries in the propagation of valuable food and game fishes. The laws for the protection of deer have resulted in their increase. Nevertheless, as railroads tend to encroach on the wilderness, the temptation to illegal hunting becomes greater, and the danger of forest fires increases. There is need of great improvement, both in our laws and their administration. The game wardens have been too few in number. More should be provided. None save fit men must be appointed, and their retention in office must depend purely on the zeal, ability and efficiency with which they perform their duties.

The game wardens in the forests must be woodsmen, and they should have no outside business. In short, there should be a thorough reorganization of the work of the commission. A careful study of the resources and condition of the forests on State land must be made. It is certainly not too much to expect that the State forests should be managed as efficiently as the forests on private lands in the same neighborhoods, and the measure of difference in efficiency of management must be the measure of condemnation or praise of the way the public forests have been managed.

The subject of forest preservation is of the utmost importance to the State. The Adirondacks and Catskills should be great parks, kept in perpetuity for the benefit and enjoyment of our people.

I wish all the States had governors like ours. What a marked contrast between this man and the present Governor of New Jersey, who says he will pardon any man convicted of a violation of a fish or game law, during his incumbency, and that all fish and game laws should be wiped off the statute books! It would be a great thing for New Jersey if Voorhees could be sent to Albany, required to put on the gloves with Theodore and get a little common sense thumped into him.

"Aside from the restrictions imposed by the laws, the amount of game which a man may kill with propriety is largely a matter of personal opinion."—A. D. G. H.

And Reynolds' opinion is, judging from his editorial utterances, that a man may kill all he can and that it is very naughty to call a man a game hog who does this.

One fool has got what he deserves. His other name is Frederick Schmidt. He and Carl Kauffmann started out, on New Year's eve, with a big tin horn, to have some fun. They got more of it than they wanted. At 58th street they stood under a window and blew loud blasts on the horn. A man pushed up the window and told them to quit. Then they blew still louder. The occupant of the house went into the street and attacked the men. He knocked the horn out of Kauffmann's hand, but it was quickly picked up by Schmidt, who blew a loud blast in the man's ear. He struck at the horn again and made a bull's-eye, driving the mouthpiece through Schmidt's cheek, and severing 2 arteries. Then he went to bed and the noise ceased. Schmidt was taken to a hospital, where a doctor sewed up his jaw. As he left the station he mumbled, "I have a happy New Year's, ain't it."

If all the tin horn idiots who disturb the peace could be fed on their horns as this chap was they might in time learn to respect the rights of people who like to go to sleep at a reasonable hour.

F. O. Tilton, of Minneapolis, Minn., was recently arrested on a charge of selling ruffed grouse in close season. His lawyer made a claim in court that the birds were not ruffed grouse, but "Oklahoma ptarmigans." This claim surprised the court, but the prosecuting attorney soon produced a copy of Webster's Dictionary, which says that a ptarmigan is:

"A grouse of the genus *Lagopus*, of

which numerous species are known. The feet are completely feathered. Most of the species are brown in summer, but turn white or nearly white in winter."

Both lawyers examined the birds which were in court and failed to find any feathers on their feet. The utter falsity of the defendant's claim was thus readily established, and the culprit was fined a good round sum.

It is unfortunate that Tilton cannot be sent to prison now on a charge of perjury. There is no such bird known to science as an Oklahoma ptarmigan, and no doubt Tilton and his attorney both knew this when they made the claim in court.

On my hunting trip in Newfoundland, in October last, I had the satisfaction of making a thorough test of one of Abercrombie's Pantasote rain coats, and found it a most admirable protection. On the day we went up the Humber river, and again on the day we came down, it rained from morning till night; yet the only places where the coat wet through were on the sides where my arms rubbed against it in paddling. But little water went through there—not enough to wet my clothing—so I landed at night dry as a bone. The other fellows who were not so fortunate were wet to the skin, and I considered myself in great luck to have had one of these shelters. If you ever expect to need one write to D. T. Abercrombie & Co., 36 South Street, New York City, for a catalogue, and say you saw it mentioned in RECREATION.

PEARY AND THE POLE.

A. L. VERMILYA.

On an ice floe cold and gloomy, in the dreary northern seas,
Stands a box car from the Erie railway line
And a man is splashing sadly 'round in slush up to his knees,
Hunting for the pole, or of it track or sign.
He is searching for the meanest, tricky thing in all the land,
For that slipp'ry, dodging, sneaking, shifting pole;
And at last when he's discovered just the place where it should stand,
He will probably find nothing but the hole.

For it's Peary, gallant Peary,
In his box car from the Erie,
Squatting on a large and chilly hunk of drifting glacial ice;
And he's getting rather leary,
While his eyes are growing bleary,
Watching, searching for the North pole in the gloaming.

With his men he lives on blubber, walrus meat, and other stuff,
Or an Arctic bird, which now and then he shoots—
But the time is surely coming if they stay there long enough,
When they'll have to eat their leather pants and boots.
If they'd chuck the foolish business, let the frigid region slide,
Man their boat and sail away to warmer seas,
It would give some other fellow, with a patent, oil-tanned hide,
Chance to go up North and stand around and freeze.

Then come back, brave, daring Peary!
We are sure you must be weary!
Take your box car and your blubber, and return to Christian lands;
For it can't be very cheery,
And it must be rather "skeery,"
Watching dashing, crashing icebergs in the gloaming.

PUBLISHER'S NOTES.

Gray & Barger, No. 309 Broadway, New York, have put on the market a gun sight which is certainly worthy of the attention of every wing shot in the country. It consists of a strap iron loop that passes around the muzzle of the gun and that forms a peep sight above the barrels, $\frac{1}{2}$ inch in diameter. In use the sight simply appears like a hair line, and through it a bird or an inanimate target can be caught as quickly as over the open barrels, without any sight. Its field of vision, at say 40 yards, is about coequal with the target that a good gun, with an ordinary load, would cover at that distance. Many experts who have tested this sight thoroughly, both in the field and at the trap, say it is a great aid, and that once a bird or a target comes within its scope a kill is certain if the gun, the charge, and the man behind the gun each do their part.

Gray & Barger have issued a circular giving a complete description of the sight and full instructions for using. This would interest any man who owns a double gun, and all such should send for it. Please mention RECREATION.

Cornwall & Jespersen carried a full page ad in RECREATION through the greater portion of last year, but dropped out during the winter months. They tell me their business dropped off materially in consequence of this, and they have now made a contract with me for 12 pages of space in RECREATION, beginning with this issue. Keep your eye on their ad, and see how long it will be before it again disappears from RECREATION. I think you will find it there every month for 5 years to come, and possibly much longer.

These people handle a large line of guns, ammunition, fishing tackle, sportsmen's clothing, photographic goods, and in fact nearly everything that a sportsman uses when he goes outdoors. Their prices are as low as can be made on reliable goods, and their business methods are all right. Look at their ad, then send for a catalogue, and say you saw it mentioned in RECREATION.

One of the most novel and expensive catalogues ever issued is that of Wing & Son, piano manufacturers, 202 East 12th street, New York. It is entitled "The Book of Complete Information about

Pianos," is bound in cloth, and is worthy a place in any library. Part I gives a brief but complete history of the musical instruments from which the modern piano was evolved. Following this is a description of the entire process of manufacturing pianos, elaborately and carefully illustrated with plates, showing all the parts and their combinations. Full information is given as to materials used in making the various parts, the action of each material in its relation to the others, and the processes of putting the instrument together. Part II contains a statement of the special features of Wing pianos, price list, with cuts showing the various models, instructions as to the care of pianos, etc. Every one who is interested in pianos should have a copy of this book. See ad of Wing & Son elsewhere in this issue. When you write mention RECREATION.

Mr. W. H. Mullins,
Salem, Ohio.

Dear Sir:—Last year my friend and hunting chum, Mr. E. Herzog, of Tracy, Minn., bought one of your Get There duck boats, and we have hunted in it 2 seasons. Your boats are all a duck hunter can wish for. What I like best on this boat is the almost unlimited carrying capacity and the great ease with which one can push through the rushes. No other boat I know of has this feature. I am so delighted with the boat that I am going to have one myself next season. I would be much obliged if you would send me your new catalogue, which I see you have advertised in RECREATION.

P. H. Ehlers, Garvin, Minn.

The Buechner Manufacturing Co., Battle Creek, Mich., is making a line of metal back albums that must prove of great interest to every amateur photographer. These are intended for holding unmounted prints of various sizes, and the leaves are so arranged that any one of them can be taken out and put back in a moment. The albums are made in various sizes and are bound in seal or calf skin, trimmed up in metal in such a way as to last a lifetime.

The prices range from 75 cents to \$6, and no matter what size camera you use, or what you may want in the way of an album, you can certainly be suited in this line. In writing for a catalogue please mention RECREATION.

The Page Woven Wire Fence Company, Adrian, Mich., has, for 9 years past, issued a paper called The Coiled Spring Hustler. The name has been changed to Page Fence Age, but it is the same "Hustler" as ever, devoted to the interests of Page Woven Wire Fence, and full of information concerning it. It will be sent free to any farmer who asks for it, and it is well worth sending for. Ask also for their "Blue Folder," which gives complete descriptions of the different styles of Page Fence. When writing, please mention RECREATION.

William Read & Sons, of No. 107 Washington street, Boston, announce a large line of navy revolvers at \$4.50 to \$5 each. The original prices on these were \$15 to \$18, but having been in military service and offered for sale by the quartermaster's department Read & Sons bought them at a price which enables them to make these remarkably low prices at retail. Any one in need of a high grade revolver, for house or camp use, should correspond with Read & Sons. In doing so please mention RECREATION.

The Davenport Fire Arms Company, of Norwich, Connecticut, has lately issued a new catalogue showing cuts and giving descriptions of its popular line of cheap rifles and guns. These goods have been before the readers of RECREATION 5 years, thousands of them are now being used by my subscribers, and all speak well of them. If you are thinking of a new rifle or a single barrel gun, it would be well for you to communicate with these people, mentioning RECREATION.

The Racine Boat Manufacturing Co., Racine, Wis., has achieved another important victory. It has captured the contract from the members of the Lakeside Yacht and Boat Club, of Syracuse, for 20 sail yachts. The Racine Co. competed with 16 other boat builders, nearly all of whom live in the East, and that they should have knocked down the persimmons is simply another example of the get-there quality of Western men.

Our business has all come from RECREATION, for we have never spent a dollar soliciting orders through travelers. During the past 2 years we have equipped 2 ocean steamers, 3 battleships, over 50 yachts, have nearly 100 jobbers handling our goods, and have sold thousands of mattresses and cushions throughout the country:

Pneumatic Mattress and Cushion Co.,
Reading, Mass.

A Crack Shot rifle, listed at \$4, for 5 yearly subscriptions to RECREATION at \$1 each. This is a neat, tasty, well-made rifle, take-down pattern, with ejector and automatic safety. It is chambered for a 22 short R. F. cartridge only, has a 20-inch barrel and weighs 4 lbs.

It is an excellent opportunity to get a good, practical rifle for small game or target, for a half hour's work.

Edgeworth Greene, of Upper Montclair, New Jersey, has recently invented a kennel, which is a novelty, and which is destined to be of great value to dog owners. Lack of space forbids a full description of it here, but Mr. Greene issues a circular in which the kennel is fully illustrated and described, and which you can obtain by writing him and saying you saw it mentioned in RECREATION.

You got me into a scrape by publishing my letter in October RECREATION. I have letters from all parts of the United States inquiring the name of the gun. These show that the Guns and Ammunition department is eagerly read by an appreciative public.

S. L. Warner, Lanesville, Conn.

I am still receiving answers from a small ad which you printed for me over 3 years ago. Many of your subscribers must have RECREATION bound, advertisements and all.

H. D. Leadbetter, Albany, N. Y.

"While it is true," replied the Pale Face, "that I made a compact with you, it was with a mental reservation."

Here the untutored Red Man manifested bewilderment.

"Is that the next reservation I shall be compelled to live on?" he asked, anxiously, his quavering voice betokening the depth of his emotion.

Ah, such is destiny, to say nothing of the growing scarcity of pine timber.—Detroit Journal.

It was essay day in a Washington primary school and the 8-year-old son of a Congressman read this:

Me and my pa went fishin' up in the mountains. We went on the Baltimore no hire railrode. I caut 2 sunfish and pa he didn't ketch nuthin' only the train and he cum mighty near missen that.

As they skated they looked at the stars—

There were easy a million or more;
Their heels flew up—and then they saw

A few they had not seen before.

—Chicago News.

PURE AND IMPURE FOODS.

"What a Man Eats He Is."

WHITE FLOUR VERSUS WHOLE WHEAT AND GRAHAM.

ROLLIN E. SMITH.

In November RECREATION an article touching on the gluten in white flour has attracted my attention. I take exception to the following statement:

"The gluten of cereal foods is their nitrogenized element, the element on which depends their life-sustaining value, and this element is in the white and foolishly fashionable flour almost entirely removed, while the starch, the inferior element, is left behind and constitutes the entire bulk and inferior nutriment of such flour. To use flour from which the gluten (in the bran) has been removed is almost criminal."

Anyone who could write thus is entirely ignorant of the facts, and probably does not pause to consider that he is giving one of America's greatest manufacturing industries a direct and unjustified slap. I refer, of course, to flour milling. It has been the fashion of late years, among the unthinking and uninformed, to lay all ill feelings to white flour, and to credit graham and whole wheat flours with the power to almost work miracles. Such claims have been made so long and loudly that many people take it for granted they are good claims; but during the last few years investigations have been made, so that now any assertion regarding the food value of flour can be proved or disproved without argument.

In talking in favor of whole wheat flour as compared with white, or patent, flour, 2 points are lost sight of, namely, the quality of the gluten and the digestibility of bread made from the 2 flours.

Much of the whole wheat flour on the market is a third grade flour mixed with a little bran. When, however, it is honestly made it does contain a trifle more gluten than patent flour does. Theorists stop there. They should go farther. Bread made from whole wheat flour does not digest so readily as white flour bread. Therefore, one gets more nourishment from white bread, if properly made.

Again, the lower grades of flour contain more gluten than patent flour; but the quality is also of a low grade.

One of the best authorities in the country in the matter of flours is Prof. Harry Snyder, chemist at the agricultural experiment station, St. Anthony Park, Minn. The results of his experiments are accepted by the Agricultural Department at Washington without question. I will quote from an article prepared by Prof. Snyder, which has not yet been published. He says:

"Graham and entire wheat flours have a useful place in our dietary, as they are laxative foods, and valuable in cases of chronic constipation caused by sedentary

habits. But to boldly state that graham and entire wheat flours contain more nourishment than standard white bread is assuming too much, as there are no figures that can verify the statement.

"It is argued by many that since wheat bran and the offal product contain more protein than wheat flour, the bran should be retained in the flour. When the composition of bran and flour are compared, it will be observed that while flour contains 2 per cent. less protein, bran contains about 8 per cent. more fibre or woody material. To recover this small amount of protein would necessitate the addition of the 8 per cent. of fibre to the flour. Standard patent and graham flour made from the same wheat contain, respectively, 12.50 and 13.15 per cent. of protein, while the fibre percentages are, respectively, .05 and .16. The offal products amount to about 25 per cent. of the weight of the wheat, and since bran contains 8 per cent. of fibre, and only 2 per cent. more protein than flour, it necessarily follows that the large losses of food value through the bran, as claimed by many, cannot take place, because there is nothing to lose.

"The addition of the bran to the flour prevents fine granulation, which makes whole wheat and graham flours less digestible than standard white flour. The comparative digestibility of whole wheat, graham and standard patent flours has not yet been definitely established, but the experiments that have been made show that the grinding of the wheat favorably influences the digestibility of the food to the extent of 10 per cent.

"Does it pay to make the human machinery sort over a large amount of indigestible fibre which can be removed by the modern processes of milling? Should the human body be made to do the grinding that can just as well be done between steel rolls? Would it not pay better to save the wear and tear on the human machinery and have the same work done by a mill?"

Experiments were recently concluded in Germany to determine the best bread for soldiers. The conclusions arrived at are given in a report by Prof. K. Pannwitz, as follows:

"The experiments, which were made on soldiers, were as to the digestibility of various kinds of bread, both wheat and rye. In all some 24 distinct kinds of bread were tested, the grouping being according to the fineness or coarseness of the grinding of the grain from which the bread was made, and the completeness or otherwise of the removal of the outer skin of the

grain and the bran from the flour. The bread, in fact, was made from both wheat and rye that had only been soaked a little and then crushed, but not ground up, to that made from the finest flour.

"As a result, the coarse breads are condemned. They are not suitable for feeding large numbers of persons, and especially soldiers. The more completely the bran is removed, also, the better is the flour and the bread made from it. Even if finely ground, bran is not a satisfactory food for man, and cannot be made so by baking into bread. It is therefore urged that the present ordinary army bread, as used by the German army, can be improved very much by the removal of the outer covering of the grain, even if the resulting flour is not ground more finely than at present."

I cannot close without a word in regard to the adulteration of flour, of which millers of the country have been accused. There is not a mill in the United States that adulterates its flour with corn flour or any other substance. Flour is one article of food which is absolutely pure!

In 1897 and the early part of 1898 a few irresponsible mills did mix corn flour with wheat flour. The milling trade became alarmed, and itself arose and suppressed the evil practice. It was done by an act of Congress, under the war revenue measure, taxing adulterated flour and appointing inspectors, whose business it is to hunt out breakers of the law.

Furthermore, the millers' associations had standing rewards offered, for over a year, for proof that would lead to the conviction of any miller or other person who mixed his flour. These rewards were never claimed.

PURE FOOD NOTES.

DR. S. B. BUCKMASTER.

Dr. W. H. Wiley, government chemist, was one of the principal witnesses before the Pure Food Commission of the United States Senate recently, holding sessions in Chicago and other cities. His testimony, based on knowledge and experiment, gave the commissioners decided evidence as to the necessity of a pure food legislation, and a bill will probably be passed by the present Congress prescribing penalties for food adulterations.

In 1897 over 100,000,000 pounds of cotton seed oil were exported from the United States to Marseilles, France, and much more than that in 1898. The oil is there treated so that it tastes like olive oil, and as such it is shipped all over the world. It is also used in making soaps, cosmetics, etc. Owing to its cheapness it is driving other oils from the market, and the French

crushers of oleaginous seeds are trying for legislative prohibitive duty on the American oil. The French soap makers are resisting this legislation, and a compromise may result, by which a harmless substance may be mixed with our cotton seed oil, making it too unpalatable for use as food.

Each person in the United States spends, on an average, \$2 a week for raw food and \$150 a year for clothing. Carroll D. Wright, the statistician, says that $\frac{2}{3}$ of the money earned in the United States is spent for food and clothing. This means that it requires more than \$10,000,000,000 to pay the yearly food and clothing bills. Prof. Wedderburn, of the Department of Agriculture, says all food, drugs and drinks are adulterated at least 15 per cent. of the whole. Much of our clothing also has inferior material mixed with it; so that \$1,500,000,000 worth of spurious material is sold to the people of this country each year. Worse than worthless! Prof. Wedderburn says at least 2 per cent of this amount, or \$30,000,000 worth, is deleterious. Coffee is adulterated with caramel, cereals, chicory, coffee beans made of flour paste, etc. Hake, haddock, etc., are sold for the higher priced codfish; cheap ginger snaps get their snap, not from ginger, but from cayenne pepper; catsup may be more than half pumpkin, horse radish is mainly turnip, etc.

The December number of the Journal of the American Medical Association briefs an article by Alex. G. R. Foulerton in the *London Lancet* on "Influence on Health of Chemical Preservatives in Food" as follows: "He thinks that boric acid and formic aldehyde, if used in the small proportions found, would hardly cause any injurious effects to the average adult, but for invalids and children it might be injurious. It is not likely that boric acid would affect the digestive process, but it might have toxic effects in a general way. Formic aldehyde, on the other hand, might, to some extent, impair the digestibility of milk. In no other article of food is the presence of these articles so important, and the need of legislation is greater because their presence cannot be detected without analysis."

FAVORS LESS MEAT.

Of course every one knows that food, when digested, is changed by the successive action of the saliva, the teeth, the stomach and its acid secretion, the bile, and the secretions of the pancreas and the intestines, almost into its component parts. At the end of the process, which is both chemical and mechanical and is most beautifully designed, the food is immediately

available, is gathered up and used as fuel and building materials, or is laid by as a reserve supply. Meat contains a large quantity of those substances which furnish force, strength and energy. If they are not used up by the body for such purposes the result is an irritant inert matter, which causes headache of various kinds, rheumatism, gout in various forms, biliousness, etc. Nature seeks to get rid of it, principally through the kidneys. If the condition continues these organs may undergo certain structural changes, which constitute a form of Bright's disease. An excess of starchy food will cause a deposit of fat, as a rule, unless one takes sufficient exercise. However, a certain quantity is required to form a well balanced ration. The growing youth and the man who works hard physically need meat, just as an engine needs fuel and water. They travel at high pressure. When a man gets along toward middle life, particularly if he is of sedentary occupation, he can not use up the same quantity of meat he did before; consequently he is poisoned. He begins to wear out and break down. In other words, the pressure is too high for the old engine. It is therefore wise for a man of 30 or 40 to decrease the quantity of meat in his diet, particularly red meat. Let him also take time from his money grubbing, before life looks to his bilious vision as yellow as the gold he covets. Let him get the green grass under his feet and the blue sky over his head. Let him take his holidays in November and spend each day tramping the hills and woods, even if birds are scarce. The companionship of the dogs, the fresh air, the beauties of nature, and the relaxation and change from the grind of every-day life, will give him healthful, happy days and restful, slumbrous nights. He will take back with him a store of pleasant memories that will sweeten many days to come.

C. E. Hancock, Yardley, Pa.

BOULIMIA.

I have always believed the hunting stories published in *RECREATION*, and have found little difficulty in permitting an equal credence in the scientific articles. The article "Boulimia," in January *RECREATION*, written by Dr. James Weir, Jr., was to me an interesting one, and I fully endorse all of the doctor's statements in regard to this subject. To some, however, who may not be so familiar with this topic, his statement that "The Indian thinks nothing of disposing of a deer's hind quarter at one sitting," may seem an exaggeration. This, however, is not the case. The doctor doubtless meant just what he wrote, and I take it that in this instance he did not refer to a small, measly fawn, but he meant the

hind quarter of a 200-pound buck. The Indian is truly an enormous feeder. On a hunting trip, in company with a friend, I employed an Indian guide, who was *par excellence* a boulimist. We had no little difficulty in providing necessary food for him. Dr. Weir related his experience with the Latin professor, who daily consumed 7 or 8 pounds of grass, wood and coal. Our Indian guide would perform even greater feats. In fact, at times, usually just before a storm, we had to restrain him from devouring our baggage and camping outfit. On the last day in camp my companion killed a moose. A discussion arose in regard to the weight of the animal. To settle the dispute, the Indian was permitted to devour the entire animal, which he did during the night. We then started for the nearest settlement, and on arriving weighed the guide. His weight was 943 pounds.

By deducting his usual weight, which was 143 pounds, we ascertained that the weight of the moose killed was not less than 800 pounds. As this expedient was resorted to solely to settle our dispute, it cannot be said to have been a true test of the capacity of the guide. To have made such a test would doubtless have required another moose or 2. It incidentally affords, however, I hope, another reliable and authentic example of boulimia, and should disperse all doubts concerning the capacity of an Indian's stomach.

Jake Koonfat, M. D., Madison, Wis.

GIVE US BETTER COOKS.

I have read with pleasure your interesting and instructive articles on the pure food question. I have been practising medicine 25 years and think fully half of my patients have been made ill primarily by improper food. Not one woman in 5 can cook food properly, especially among farmers' wives, who have a chance for the best of food. Taking the broad ground that any food is impure which is not digestible or nutritious or will be injurious to the eater, bad cooking is to blame for 90 per cent. of the impure food. No one can eat spoiled meat or butter without knowing it. Few of the food adulterations are really harmful, but what show is there for us when the ladies, "God bless them," with the best of intentions, feed us eggs as hard as wood, meat fried to a crisp in lard and as nutritious as sole leather, biscuit and pancakes that nitric acid wouldn't dissolve? I wish we could marry all the poor cooks to the game and fish hogs and then make it a penitentiary offense for any other woman to marry until she could cook a good meal. Then game hogs would soon die out and cooking schools would flourish.

W. P. Hartford, M. D., Cassville, Wis.

FORESTRY

EDITED BY DR. B. E. FERNOW,

Director of the New York School of Forestry, Cornell University, assisted by Dr. John C. Gifford, of same institution.

NUT TREES FOR KANSAS.

Would English walnuts, chestnuts, filberts, etc., grow here; and how long would it take to have bearing trees from seed? Would they be a good investment? If they would not grow here, what nut trees would? How long does it take a tree to grow a foot thick? Where can I get young trees? How far apart ought they to be planted? On what kind of ground? I have thought a great deal about planting a nice grove of nut-bearing or lumber trees, but don't know anything about them. Do you think it would pay? About what would it cost an acre to plant trees? Give me all the information you can.

F. P. Zacheile, Burlington, Kan.

ANSWER.

The planting of nut trees in Kansas would be a doubtful venture. The growing of the English walnut has been unsuccessful in the United States except on the Pacific coast. Even in our South the tree suffers from parasitic worms in its roots and from drought. Filberts suffer in this country from a serious fungus pest. It is also doubtful whether the chestnut would succeed. The common American black walnut would probably grow well in Kansas. The United States Department of Agriculture furnishes on application a good book on "Nut Culture in the United States, Embracing Native and Introduced Species." In that book the author says, in reference to the English walnut: "East of the Rocky mountains the English walnut has been most successful in a limited area along the Atlantic slope from New York Southward through New Jersey, Southeastern Pennsylvania, Central Virginia, North Carolina and Georgia." The chestnut does not grow naturally in Kansas, although if planted it might thrive. The American chestnut and black walnut are the 2 most promising nut trees for that region. Seed should be obtained from a place as near to and as nearly like Kansas as possible. The book referred to gives all the information necessary on the subject. It was published under the direction of the Division of Pomology, Department of Agriculture, Washington, D. C.

CORNELL LEADS IN FORESTRY.

Learning, like water, flows downward. The standard in any subject must be set by the

universities before any degree of interest or knowledge can be expected among the masses. As a regular course of instruction forestry has no place in the public schools, in which too many subjects are already taught. In higher American institutions instruction is offered in every imaginable line, regardless of its importance, except forestry. Cornell University is leading the way in this line, and no doubt other institutions will soon follow. At a recent meeting of the students of the New York State College of Forestry, which is a part of Cornell University, there were 18 forestry students and 3 forestry professors present. These men are learning the profession for the purpose of making it their life work. In addition to these students there are about 60 others who are taking the lectures for various purposes. There are architects who have come to learn timber physics; agricultural students, who have come to learn how to manage their wood lots, sugar orchards and pineries; there are others who are interested in the subject from a national economical standpoint, and still others who are studying the subject because they are friends of the forest and of the animals and plants which inhabit it.

SPORTSMEN SHOULD GUARD AGAINST FIRES

I read in a recent number of RECREATION, in the Forestry Department, an accusation I must dispute. The hunter is blamed as one who sets the woods afire. I have hunted a great deal and belong to several hunting clubs. I deny the charge of setting fire to woods, purposely, by accident, or in any other way. Our camp regulations will not admit of such a thing. First, we make no fires by logs. Second, when we break camp the last thing we do is to pour water on the camp fire until every spark is extinguished. This is law in camp with regular hunters. There are woods tramps, who camp out and claim to be hunting. They shoot at anything that moves. They are the kind of men who may set the woods afire. I dare say that you never set the woods afire. Genuine sportsmen don't do it. They are always careful about fires. Go to a hunter's camp and if he builds his fire by a big dead log you may mark him as inexperienced and knowing nothing of the genuine hunter's rules. Dead logs are one great cause of forest fires. Never build a camp fire about

a log. A careful observance of this rule will save large tracts of forest.

Chas. Gibson, Eufaula, I. T.

ANSWER.

Nevertheless, there are other sportsmen who habitually leave fires burning when vacating camps. I have personally seen several instances of this, and have put out such fires myself.—EDITOR.

SYSTEMS OF FOREST CULTURE.

The system to pursue in the management of forests depends on the quality of the locality and the purpose of the forest. By "quality of the locality" a great deal is meant. First, the yield capacity of the soil, which depends also on the climate; and secondly, the nearness to market and transportation facilities. In addition, the absence or presence of too much moisture is also important. The determination of the method of management depends also on the purpose of the forest. The purposes of forests may be roughly classified as follows: Forests of a purely business nature; forests in combination with agriculture; forests for game preserves; forests for pleasure parks and groves, and protection forests. The latter may be divided into forests for the prevention of floods; forests for the fixation of shifting sands; forests for windbreaks; forests for sanitary purposes; forests for the prevention of earth slides and avalanches, and so forth. Persons in writing me for information in reference to their forests should not fail to explain in full the quality of the locality and the purpose of their forest.

TREE PLANTING PLANS.

The annual meeting of the Tree Planting Association of New York city was held at the Merchants' Club, No. 346 Broadway, on December 9th.

Hon. W. L. Strong, president of the association, presided, and one of the guests was Dr. Stephen Smith, of the State Board of Health.

Reports of Secretary John Y. Culver and other officers showed the membership increasing and work progressing satisfactorily.

About 1,700 trees have been planted by the association since January, 1899, along the river front and in residence streets. It is proposed to extend this tree planting to the tenement house district, where the association thinks the trees will not only beautify the ugly streets, but afford relief to the residents.

There is no initiation fee in the association, and the annual dues are \$5. Ex-Mayor Strong was re-elected president, J. Y. Culver secretary, and C. R. Henderson treasurer.

SEEDLINGS.

For years the American people have laid waste the woodland with a high hand and an outstretched arm. They have destroyed the forests that crowned a thousand hills and in so doing they have changed our climate, once so temperate, to one of raging storms, floods and long summers parched by the burning sun. The birds and animals, once so numerous, have been robbed of their homes and have either fled to some isolated spot or else must succumb to the fate in store for them.

The destruction of the forests and the slaughter of the living creatures are deplorable indeed; but now that RECREATION has come to the rescue we may hope for the future.

Chas. W. Potter, East Enterprise, Ind.

The first journal of forestry ever published in the United States, called the "American Journal of Forestry," was edited by F. B. Hough, first chief of the Division of Forestry, Washington, D. C. It was published by Robert Clark & Company, of Cincinnati, Ohio, and lived but one year. It forms, however, an interesting volume, and no forestry library is complete without it.

It is a noteworthy fact that the Dismal Swamp of Virginia is perfectly healthful, while the surrounding territory is infected with malaria. In early times it was the custom to fill ships' tanks with the amber-colored water from the swamp because of its healthfulness and keeping qualities.

In the forests of India the elephant is used in wood transport. Although it requires 2 coolies to cut sufficient herbage to keep him, he works with more intelligence than any other domestic animal. The logs are carried and piled up with great care by these remarkable creatures.

If you are interested in the Forestry department will you not kindly send me occasional notes and items for it? If you would like to know anything about forestry ask questions and they will be answered through this department.

One of the most promising of all American trees for timber culture is the Douglas spruce, *Pseudotsuga taxifolia*. It grows rapidly, endures drought, is a beautiful tree and forms timber of excellent quality.

Bobbs—Some man has invented a typewriter that you just sit down and talk to and it writes out everything you say.

Dobbs—I guess I'll keep mine. She doesn't write everything I say.—Baltimore American.

HOW I GOT EVEN WITH MY GUIDE.

FRANK SEAMAN.

Some years ago I went to California to visit a brother. After I had been there a few days he asked me if I would not like to go out and kill a deer. I said I had often felt that way, and if there was any chance for a shot I was willing to do any amount of hard work to get it. He said there would be little work about it. All that was necessary was to drive to the Hot Springs in the mouth of the canyon, a few miles from there, where we could put up at a comfortable country hotel, and get our deer within a mile of the house.

We drove out in the afternoon and engaged a guide. He said he knew all about where to put us, and that we were sure to get shots; that there was a salt lick a mile from the house, where deer came every night. The moon was nearly full then and the time was just right for that kind of hunting. He said he had built scaffolds in 3 different trees, on opposite sides of a small lake which the deer were in the habit of using.

We went out just before sundown. He put me on what he considered the best scaffold. Then he took my brother a mile down the lake and posted him in another tree. He said he would himself occupy still another scaffold. The moon came up brightly over the hill, and I could see everything, distinctly, within 100 yards of me. The guide had shown me the lake nearest my stand, and sure enough the ground was tramped up as if a herd of sheep had been there. I felt sure there could be no doubt about my getting a shot, so I waited patiently until about 10 o'clock. Then I saw a fog coming up the mountain. The guide and the hotel man had told us the fog would be along about that time, and that it came every night; so we had taken our overcoats with us and hoped to be comfortable.

The fog finally reached my tree. It seemed to travel on the ground, and I could see it gradually cover the earth beneath me. Then it climbed slowly up the tree until it reached my feet. I could feel the dampness through my shoes in a minute. Then I felt the measly stuff climbing up my legs, inside of my trousers. Then my feet and legs began to get cold. Finally the fog crawled up under my overcoat and played hide and seek up and down my spine. I shivered like a cornstalk in a Kansas zephyr. My teeth chattered like a horse fiddle, and I felt the marrow in my bones slowly congealing. Did you ever get caught up a tree in a California fog? No? Well, I hope you never may, but I wish the fellow who stole my dog might be,

The guide had told me he would come back to the trees, pick us up, and take us in just before the fog came, or, at least, within a few minutes after; so all this time I was anxiously listening for footsteps or for voices, but none came.

After waiting what seemed a long time I struck a match and looked at my watch. It was 11 o'clock. Soon after this I heard footsteps and rustlings among the brush, and felt that at last my deliverer was coming. I listened, and was soon convinced it was not a man, but most likely a deer. It might of course be a bear; for we had been told there were some in that country. I had been tempted to climb down from the tree and chase myself up and down the lake in order to get warm; but when I thought of the stories I had heard of Sierra Nevada grizzlies, I concluded the perch was a pretty good place after all.

Occasionally the fog would break a little and the moon would come through. At each of these times I would look at my watch. The wheels seemed to have grown rusty and the hands moved slowly. Finally they got around to 12 o'clock.

Meantime I had heard more noises among the brush, and each of these made me more contented to stay in the tree. Finally I yelled like a lost tenderfoot, hoping to make either my brother or the guide, or both, hear me. I waited several minutes for a response, and, getting none, yelled again. Then I let out several more yells, each stronger and louder than the others; but the only response I got was the cracking of brush and the thumping of hoofs on the ground, as some frightened deer went up the hill.

My bones were aching so that I seriously wondered whether they would not break when I undertook to move. I would have given all the money I could borrow, from all my friends, to have been in the little country tavern, tucked in a good warm bed; but longing for luxuries does not bring them. If it did we would all be rich. The hours dragged on, one after another, like centuries.

Finally, about 4 o'clock, I heard human footsteps. The fog had just begun to lift and I saw the guide coming. Possibly some men would have received him kindly, and would not have said anything harsh to him, but I am not built that way. I am glad no ladies were there to hear my remarks. I asked the guide where in hades he had been all night. He said he had been watching at the upper lake. I asked why he didn't come and get us and take us home before the fog came, as he had agreed. He said there were deer close

around him all night, and inasmuch as neither of us had had a shot he thought it his duty to stay, in the hope of getting a deer he could give us, and that would repay us for staying out. I believed his story, at the time; but when I afterward noticed he had come to us without his overcoat, a foul suspicion crept into my mind.

I shook myself, pulled myself together and finally got control of my muscles to such an extent as to climb down the tree. Then I walked fast to get up my circulation while the guide went and got my brother. When they came I asked the guide where his overcoat was, and he said: "By Jove, I left it at the other lake, where I was watching. Well, never mind, I'll go and get it after breakfast. We will go to the house now and get something to eat."

One of the hot springs was within a few rods of the hotel, and as we went by it occurred to me that a good hot bath would be an excellent remedy for the rheumatism the fog had left in me. The guide said I could just as well have it as not. There was a bathhouse, but it was as dark as pitch inside of it.

My brother preferred to go to the house and to bed, so the guide and I went into the bathhouse and, after groping around a long time, we found a piece of candle. We lighted this and I went into one of the apartments, undressed and plunged into the hot water. This was really a great luxury, and I cooked myself until I began to feel alive again. Then I asked the guide if there was any cold water that I could get into. He said,

"Yes, there must be a cold plunge in another part of the building. I will go and find it."

He went groping through the hallway, and in about 5 minutes I heard a most unearthly shriek and a splash that sounded as if a log had fallen off a precipice into a lake. Then there was a series of howls, groans and screams that made my hair stand. I took the candle and went to see what the trouble was. I followed the noise until I reached the scene of the disaster.

Here was a big well, some 20 feet across and probably 20 feet deep. It was 10 or 12 feet down to the water. There was a narrow platform around 2 sides of this room, and the guide had simply walked off this into the well. By the dim light of the candle I soon found a rope ladder that extended down to the water. I caught this and pulled it up.

When the guide saw me do this he yelled:

"What on earth are you doing that for?"

I said: "My boy, you played me for a sucker, didn't you?"

"No, I didn't," he said.

"You kept me up a tree all night, didn't you?"

"No, no," he said; "throw down the rope and let me out."

"You had a mighty good joke on me, Dave, and no doubt you and your friends down at the hotel had a lot of fun when you were discussing it over your beer. Probably you will have a lot more fun this morning, when you get with them again; but now I am going to have some fun with you."

He howled, begged, shivered, and his teeth chattered even worse than mine did when I was in the tree. He offered me everything on the earth if I would only throw down the rope ladder and let him climb out. I said:

"My boy, don't hurry. You are not nearly so cold as I was up there in the fog. Besides, you are having plenty of exercise to keep up your circulation. I had nothing to do but sit on that platform and wish you were in hades."

Still he begged, and groaned, and howled.

"Calm yourself, Dave. Don't be in a hurry. I think of keeping you in this well about as long as you kept me in the tree. Let me see, that was about 8 hours."

"For God's sake, let me out, or I shall die with this cold. This water is like ice."

"That fog was like ice, too; like shaved ice. I'm sure you are not so cold as I was in the tree. You have probably heard the saying that 'the man laughs best who laughs last.' This is where I laugh."

Thus I tantalized him, played with him and gloated over him for a quarter of an hour. I realized all the time that the water was close down to the temperature of ice; but enjoyed the situation more than I would have enjoyed killing a deer early in the evening and bringing it into camp.

After I had wreaked all the vengeance on the reprobate that I felt was due him, I finally let down the rope and he climbed out. I had concluded, meantime, that I didn't care for a cold plunge, so took the candle, went back into my bathroom, dressed and went over to the hotel. The guide had meantime been taking off his clothes and wringing the water out of them, and so had not reached the house yet. The first thing I saw when I walked into the office was his overcoat, hanging on a corner of an old cupboard. Then my suspicions were all confirmed.

He had planted my brother and me in trees, had gone back to the hotel and had a lot of fun at our expense. Then he had gone to bed. At 4 o'clock he had got up and gone to our relief. But I was even with him, and am willing to bet 10 to 1 that he never played another trick on a tenderfoot.

ITCHING.

G. A. WARBURTON.

Snow is going,
Streams are flowing,
In a mad race toward the sea;
All the signs about are showing
That my beauties wait for me.
Willows' budding, robins singing,
Grasses springing, days grow long;
Winter over, insects hover,
Birds pour forth their springtime song.
Bring my fly-book, rod and basket,
Bring my boots and let me go—
Where? How senseless 'tis to ask it,
You're no fisherman, I know.
Where? There is no other object
That can fill the soul so full,
As to go where trout are gleaming,
In some sun-lit sparkling pool;
Out into the open meadow,
Or where alders cast their shade.
Spring is welcome for the flowers
And the bird-songs, but I wish
Everybody knew the pleasure
Of just going out to fish.

UNSETTLED HIS NERVES.

The girl typewriter is sometimes cheerfully inconsequent. An editor recently engaged a typical typist and depicts her as an innocent young thing with big baby eyes, who took 10 minutes to remove an elaborate creation of a hat and 15 minutes more to prepare her notebook and pencil, for she was likewise one of the fair girl stenographers you read about.

Then she settled down to business and took a bit of dictation, with this result:

"The growing use of the Automobile will effect the accident commings on more ways than one in the first place undoubtedly the greater expertness has ocured in envolving them by the general use which will be for the next few years an increase of accidents to the persons by collision of vehicles to people. In the 3rd, place unless the commings make expecial expansion against the electric motor vehicle which can be hired by the public persons that will be riding them will undoubtedly recover by the usual 'Combination' or prevailing prevention coming duble indemnity in case of accident occurring while passenger conveyance proper by the electric cabs, etc., for the double indemnity."

Her employer went away on a week's vacation to settle his nerves.—Exchange.

"And why won't you marry me?" pleaded the lion.

"Well, to tell you the truth," said the lioness. "I'm afraid you'd be making a roar all the time."—Kansas City Independent.

RULING PASSION, ETC.

The rumble of the ponderous machinery is heard.

Faster—faster revolves the cruel saw wheel.

And the beautiful heroine is being dragged nearer those awful teeth.

"Ha! ha!" hisses the merciless villain. "I'll just tell them that I saw you."

The heroine being from Boston, this is more than she can stand.

"Ignoramus!" she shrieks above the din of the saw. "Just tell them that you sawed me!"

And then the hero dashes in and lifts her away from the hungry teeth.—Chicago News.

The Professor—I have a new conundrum for you. Why is a mouse like a haystack?

The Doctor—A new conundrum! That had whiskers when I was a boy. A mouse is like a haystack because the cat'll eat it. New conundrum! Ho! Ho! Ha! Ha!

The Professor—That isn't the answer at all. The points of resemblance are these: You can't find a needle in a haystack, and you can't find a needle in a mouse. Some people weary me exceedingly with their affection of superior knowledge.—Chicago Tribune.

"What is a flirt?" asked the small boy.

"A flirt," replied the old bachelor, "is a pretty woman."

"But what kind of a pretty woman?" persisted the small boy.

"Any kind of a pretty woman," answered the old bachelor.

"Well, how pretty must she be?" the youngster insisted.

"Oh, pretty enough to have a chance to flirt," returned the old bachelor irritably.

And still the boy was not satisfied; but as he grows older he will understand it better.—Chicago Evening Post.

Bank Cashier—This check, madam, isn't filled in.

"Isn't what?"

"It has your husband's name signed to it, but it does not state how much money you want."

"Oh, is that all? Well, I'll take all there is."—Philadelphia Record.

There is a chance for some genius
To spend his days in clover

By inventing cloth for overcoats
That will fade alike all over.

—Chicago News.

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We will send four full quarts of Hayner's Seven-Year-Old Double Copper Distilled Rye Whiskey for \$3.20, express prepaid. We ship on approval in plain, sealed boxes, with no marks to indicate contents. When you receive it and test it, if it is not satisfactory return it at our expense and we will return your \$3.20.

Such whiskey as we offer you for \$3.20 cannot be purchased elsewhere for less than \$5.00, and the low price at which we offer it saves you the addition of middlemen's profits, besides you are guaranteed the certainty of pure whiskey absolutely free from adulteration.

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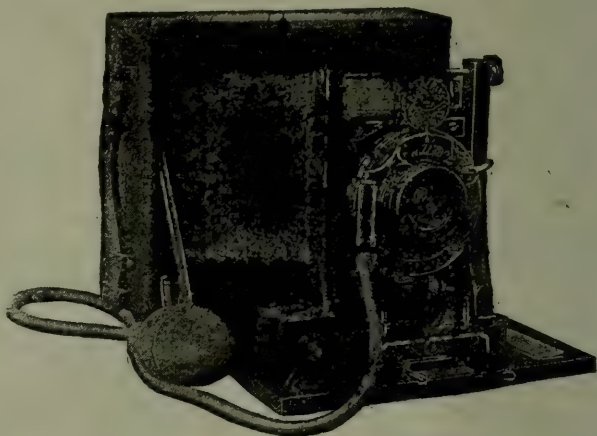
We guarantee the above firm to do as it agrees to.—EDITOR.

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3d—They embody the **cream of material** and the **most skillful labor**, and are as **lastingly useful** as they are strikingly **elegant in appearance**.

The above are not mere words, calculated to sound well. They are essentially extracts from scores of letters from users of the

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CRESSKILL, N. J.

AMATEUR PHOTOGRAPHY.

"A Bird on the plate is worth 2 in the bag."

CAMERA NOTES.

GENE S. PORTER.

I recently visited the gallery of a city dealer who handles amateur negatives and material exclusively, and was privileged to examine a big batch of negatives and prints. I immediately noticed the top-heavy cloud effects. The fiat seems to have gone forth, "Let there be clouds," and there are clouds until one feels like waiting till the clouds roll by. They will roll by, for it is too much to ask the public to consider seriously photos that have the foreground from one negative, the clouds from another, and the figures from a third. It is permissible to print in clouds if they are taken at the same time, with the same lighting and in the same position as the landscape with which they are to be used, the only difference being that you expose in the landscape for the shadows, and snap the clouds. But to get a few glorious old cloud negatives, and then print them into every little patch of sky, is too much! Amateurs should not waste material over every craze that comes along. There is no photographer whose work occupies a higher plane than Steiglitz's. He has won a number of medals, and his pictures bring prices that turn an amateur dizzy, yet he is content to reproduce samples of his photos in a recent number of one of our best magazines without a suspicion of clouds in the sky. In one or 2 instances there is a faint, dark shading; and well may he be content, for he has both salon and medal pictures, copies of which sell for hundreds of dollars.

I cannot imagine Steiglitz printing the sky to "The Net Mender" from one plate, the foreground from another and the figure from another. It seems too much like juggling. I should never seriously consider such a composition a photograph. Take your picture on one plate. It will be no more trouble or expense to go again and again and try over and over until you get sky, land and water so lighted as to produce well in all parts, than to patch up a print from 3 or 4 negatives. It is legitimate and right to work with your plate; to develop locally, *i. e.*, to stop back the sky with bromide, and develop foreground or whatever part you desire to emphasize with stronger developer and brush work; to intensify a weak plate, which snap shots especially need; or to do anything in the way of exposing, expert manipulation in developing, or retouching the negative in a moderate degree. When you have done this, print your picture and let it stand or fall by its merits. If it falls, go at it again, until you get the hang of it. Then comes success to be proud of.

I know of no better plan for the ambitious amateur than to set himself a mark, high up among the shining lights that are labelled "success," and then strive mightily to attain it.

The woods are full of journals of amateur photography, and the journals are full of the writings of zealous amateurs. I wonder if somebody tries all their formulas and advice, and I wonder what happens if they do; because much of it sounds peculiar. I have decided to present to the readers of RECREATION as a refreshing change some advice bearing on the rough places we all strike, gleaned from the best authorities on photography.

ABOUT DIAPHRAGMS.

"Diaphragms ought not to be used to lessen the light, but only to get a sharp picture all over the plate. The largest diaphragm to effect this is the one to use. A smaller one will give only monotone pictures without any advantage."

S. C. Passavant.

"The original purpose of the diaphragm was to stop the passage of certain useless rays through the lens, thus preventing the distortion which would follow their admission, and thus to secure a correct, sharp image. The importance of the diaphragm is great. Too much attention cannot be given to its application in practice."

Wilson.

"Some opticians say the diameter of the smallest stop should never be less than 1-25 or 1-30 the focal length of the lens. On the other hand, the larger the stop, if correctly exposed, the greater the amount of detail in the shadow, the bolder the picture, and the more atmosphere. Probably the best rule to adopt is to use a stop small enough to give sharp definition at the edges of the picture and no smaller."

C. W. Dean.

"Always use the largest possible stop, in order to secure vigor, roundness and atmosphere in the picture. A small stop produces sharpness, but at the expense of the foregoing essential qualities.

"As a rule focus on some prominent object in the foreground, or on what is to constitute the point of interest in the picture.

"Do this with a medium stop, then insert the next or the next but one smaller, sufficient to prevent objects not focused from appearing too much blurred."

J. H. Dallmeyer.

It may not come within the province of true photography, but exquisite pictures can be made by printing from good and suitable negatives on sensitized linen in-

stead of paper. The sensitizers now on the market can also be used on glass, celluloid, wood, silk, paper and postal cards. If a sufficient number of RECREATION readers wish an explanation of this process I will give it. A strong 5x7 landscape negative prints exquisitely, for framing, on coarse linen; and portraits of beautiful young girls and children on fine linen or silk. For old faces, if they are frail and delicate, use fine linen; if they are strong and lined, especially typical heads, use very coarse.

The Nepera Chemical Company wrote me they had sent me samples of their new sensitized postal cards and a heavy, rough paper. When the package arrived I laid it carefully away in my print paper box. Two weeks later, having a little leisure, I decided to try it. I made a trip down town for chemicals, got out several negatives I wanted to try, and the whole chemical apparatus, mixed my stuff and put up the shutter. Then I carefully opened the package and took out some beautifully *printed business cards!*

The December number of the Photo-American contains an article on developing, in which it says: "Just snap the thing, and then develop, develop, develop until the negative is as hard as granite. Then after fixing, wash thoroughly and use persulphate of ammonia according to formula published in this journal. The foreground will remain the proper strength, while the other distances will simply clear up and maintain the proper balance." The thing in question was the Dewey arch. When doctors disagree, who shall decide?

A certain magazine for December contains some reproductions of photos of electric sparks, made in the line of scientific research; by J. K. Tarrant. To the naked eye a spark of electricity is a mere flash; to the wonderful dry plate it is an exquisite figure of almost mathematical precision. From a central point branch out long feathery fronds, reminding one of the most delicate sea ferns and mosses in undulating water; or the exquisite tracery of Jack Frost on our winter windows.

The motto of the amateur photographer is to "expose for the shadows and let the high lights take care of themselves."

Later I shall quote some authorities on the question of time.

PHOTOGRAPHIC RETOUCHING.

G. A. MACK.

Last summer I reached the portrait stage of photographic art and tasted of

that knowledge which increaseth sorrow. My estheticism led me to choose subjects from among the pretty girls of my acquaintance, and, Eve-like, they fed me with apples.

The first thing over which I tripped was the light. Not possessing a specially constructed studio, I used a room lighted from the North by 2 large windows. No possible arrangement in it of background and reflectors would give an even lighting. It was all right for Rembrandt and other freak effects, but those were not popular with my subjects. Few ladies care to have a shadow cast over any of their charms. Finally, I took to posing my victims on the lawn in the shade of the house. When I had impressed the family clothes-horse, draped with light gray cambric, into service as a background, lo! the light problem was solved.

Then my portrait lens developed a microscopic attention to detail that was positively disgusting. If a girl was blessed by Hygeia with just enough freckles to be altogether charming that morbidly conscientious lens saw in her face something resembling a faded checkerboard with features. However, I got around that difficulty by vignetting, and, in severe cases, by covering the printing frame with one or 2 extra thicknesses of silk bolting cloth. Of course, this made printing slow; but art is long at best. In this way I produced portraits which I saw were good. With feminine perversity my subjects refused to see what I saw. They pouted. They made disparaging remarks: "Oh! do I look like that?" "How big you've made my mouth." "I don't think it looks a bit like me."

Averaging their comments, I learned that every pretty woman thinks herself 127 per cent. handsomer than she is. Then I took counsel with myself and vowed I would yet make a portrait of some snub-nosed, freckle-faced girl more beautiful than that of an houri fresh from Paradise. Alas! To say is one thing; to do, another. I bought materials, made a retouching desk, and strove manfully. Experience taught me that there are refinements in retouching beyond the ordinary amateur.

To do really artistic work one must have been born an artist, yet any one may learn by practice to greatly improve an unsatisfactory negative. Freckles, moles and wrinkles may be removed from a portrait, bones hidden, hollows filled out, eyebrows curved and defined, under lips plumped and straggling hairs clipped from careless coiffures. The enlargement of an eye, the straightening of a nose and the change of expression come within the province of the artist.

"Spotting out" is a delusion and a snare. It requires work on both negative and

print, and the result is usually abominable. Never show a retouched print to people with sharp eyes if you care a straw for their opinion.

Don't try by retouching to hide poor work. Use the art solely to hide or modify blemishes in the subject and to tone down too sharp definition and too violent contrast. If your negative is poor through faulty technique, resulting in pinholes, scratches, dirt spots and that sort of thing, throw it away and make another with more care.

Writers on retouching recommend the use of China ink, Chinese white and various pigments. They are well enough in their place when one has mastered them; but the amateur would better confine his maiden efforts to the pencil and the knife. Plumbago, either in a pencil point or powdered and applied with a stump, will cover a multitude of photographic sins. To obliterate a line, such as a wrinkle, for instance, your pencil cannot be too sharp. Fine it on the smoothest of sandpaper. There are many ways of touching with the pencil—by lines, half circles, cross-hatching, and so on. The simplest and for a beginner the most effective is the dot. Tap gently on the surface to be covered, holding the pencil horizontal to the plane of the film.

Thousands of dots on several superimposed surfaces may be necessary. Trifling defects may be penciled out on the film. A better way is to touch the spot with turpentine, allow it to dry, and work on the surface thus made. If more color is needed apply retouching medium and pencil on that. If still more, put matt varnish over all, and continue dotting. Should the combined result fall short of your desire turn to the glass side of your negative and work there, first on retouching medium and then on varnish. That gives you 5 layers of pencil work on as many distinct surfaces, enough to blot out the darkest shadow.

Portrait retouching is a fascinating amusement, and after you have gained moderate skill your pretty lady friends will rise up and call you blessed. When you can paint the lily and gild refined gold, try your hand on the picture of a homely girl. If you can please her, you are a sure enough artist.

Retouching a landscape is a very different thing. When you have taken one with due regard to time, light, development, etc., rest content, unless you love trouble for its own sake. You can, to be sure, deepen the shadows and raise the lights; but it is easier to make other exposures under varying light conditions until you get what you want. Yet I must confess having seen one picture into

which stump-worked clouds were introduced with marvelous cleverness, and, moreover, reflected in the water of a lake. It moved me to emulation. When I had finished my rival masterpiece I looked at it and wept.

Beginners will find help and encouragement in a little book by Andrew Young entitled "The A B C of Retouching." It can be bought for 25 cents from most photo supply dealers.

A CHEAP TONING BATH.

Kindly answer 2 or 3 questions in regard to the toner for platino paper mentioned in August RECREATION and I will be much obliged to you. The formula is: Platinum chloride, 15 grains; chloride copper, 20 grains; saturated solution of citric acid, 2 ounces. Will this give the distinct black and white tone? Is it as permanent as other toning solutions? How many cabinet photos will one dram of stock solution and 15 ounces of water tone with safety.

Harry E. Loftie, Syracuse, N. Y.

ANSWER.

The formula quoted seems a most desirable one. It will cost less than $\frac{1}{2}$ the price of the ready prepared article; will tone 2 dozen cabinets and perhaps more, which makes the whole preparation good for about 3 gross of cabinets. I believe the cupric-platinum bath permanent. Gold and copper have long been used, sometimes unknowingly, by those who made their own gold chloride from U. S. coin, in which is an alloy of copper. I would advise making up a solution of platinum and citric acid alone, without the copper, for, if a bath needs strengthening, it is not best to add more of the toner, but simply to replenish the platinum. A few drops of platinum solution are often quite sufficient to make the bath finish its work on a few untuned prints left of a batch, thus saving the trouble and waste of a new bath.

My brother is a subscriber to RECREATION, and I have read it so much I have a severe case of amateur photographer's fever.

Can you make a living room into a dark room by using 2 shades on windows, one orange or ruby and a common green shade over that?

How long can you keep a dry plate, after exposure, before developing?

G. C. Price, Mooresville, W. Va.

ANSWER.

You can make a dark room out of a living room with red curtains by adding ordinary yellow ones, but these curtains must be pinned tightly to the sides, for one

little ray of light, even through a keyhole, will ruin a fast plate 5 feet away. I do the trick with frames which are covered with red paper and which fit the windows tightly. I stow them on the ceiling by hooks when not in use.

Dry plates, having been fresh when used, may be kept months in winter. Certain cheap plates will only keep months, while some of the first class ones keep years. I recently developed some exposed 4 years ago in India. They are good.

E. W. N.

SNAP SHOTS.

In September RECREATION I find the following in regard to separate gold bath: "Neutralize by adding saturated solution of borax, bicarbonate soda, etc." How much of the solution of borax is required to neutralize the 48 ounces of water and 1 ounce of chloride of gold?

How many 4x5 prints will chloride of gold in 40 ounces of water tone? Will the solution keep a week?

F. T. Morgan, M. D., Pantego, N. C.

ANSWER.

One grain of gold will tone 24 4x5 prints, even 30 at times. A gold bath will not work well if neutral. It must be upon the alkaline side in order to precipitate gold on the print. A neutral bath works indifferently, but will keep a week if necessary. An alkaline bath must be used at once.

Test the gold after adding borax with litmus until both blue and red litmus are not changed. Two words fully answers the question, viz.: *Use litmus.*

E. W. Newcomb.

Will you please tell me if the acid-fixing bath, described in the August number, page 152, will keep as well as a plain hypo bath? Please explain fully what is meant by the different sensitometers stamped on plate boxes.

F. J. D., Elizabeth, N. J.

ANSWER.

The acid hypo bath will keep fairly well, but no fixing bath in which acid or alum is mixed will remain good as long as a plain bath, for such additions are likely to decompose the bath. Hypo is so cheap, however, that one can afford to discard a bath once a week. The sensitometer is an instrument for ascertaining the speed of the emulsion with which the plate is coated. The emulsion of a batch of plates is tested with the sensitometer, and whatever speed the plate tests is marked on the box as sensit. 40, 50, etc. The sensitometers used by the different plate manufacturers are not alike, so it does not follow that 2 different brands marked sensit. 50 are of the same rapidity, more's the pity!

My experience in photography has been somewhat checkered. I had no idea when I purchased my first camera—a 2 x 2—that I should ever want another. Out of 36 plates one poor negative was the result of my labors. The utterness of my failure to make a good picture influenced me to buy another machine. My next camera was a 3¼ x 4¼. The manufacturer made a mistake and put a good lens in a cheap box, so I had better success with that one. I had progressed far enough by that time to undertake developing. In that I had poor luck, but by patience and perseverance I obtained a lot of poor, some fair and a few good negatives. When once you get the craze you won't stop short of a good camera. I now have an excellent 5 x 7. I am not thoroughly acquainted with it yet, but have obtained some fine negatives.

C. W. Walden, Johnson City, Tenn.

That is right. Every amateur should do his own developing, toning, fixing, printing and mounting. Any man who turns his undeveloped plates over to a professional misses the most interesting part of the work.—EDITOR.

Alum must not be used in the hypo bath. There is no sense in it anyway, and it causes more trouble than could be told. Repeated articles on this subject do not seem to deter some from using it, and then they come to me with most uncommonly dirty looking negatives and calmly blame the plate. Alum and hypo do not mix and stay mixed. After a little while the hypo, if kept, is worthless; nothing remains but a precipitate of sulphur. The hypo is decomposed. Even with fresh hypo and alum there is generally a white deposit all over the film which is by no means easy to remove. For hardening and clearing the film the safest and best addition to hypo is just plain bi-sulphite of soda. Mix 2 ounces with each pound of hypo in solution and you have a simple and effective substitute for alum. If alum is preferred, put the negative in a tray containing alum solution and after a few minutes' immersion take it out and rinse it well before it is put in the hypo.

Many negatives are lost through no fault of the printer, by being cracked. If the film is not broken, perfect prints can be easily taken off in the following manner: Take a clean glass and place in printing frame, then cut a piece of plain albumen paper (not silvered) the size of negative, and place face down on the glass in printing frame, so the albumenized side will be facing out when the frame is closed. Then place negative in frame on

top of albumen paper, put at least 2 thicknesses of tissue paper on front of the frame, put on printing paper, and print square in the sun. If it shows a line, add another tissue. This will print much faster than you think, will not give you any bother and is guaranteed to work every time, if the film is not broken. If you have no albumen paper, use the baryta coated paper that comes around Aristo paper.

Will you please answer the following questions: (1) What can be used to prevent films from curling after being dried? (2) I believe I have seen an article somewhere stating that glycerine, mixed in the hypo, will prevent curling. If so, please state what proportions are to be used. (3) Also, please give correct amount of hypo to be used in 8 ounces of water.

F. H. G., Chicago.

ANSWER.

(1) Methylated spirits rubbed on the back of the film. (2) One part glycerine to 30 parts hypo. Better use glycerine in the water after the hypo. (3) 2 ounces of hypo.

The owl, of which I send photo herewith,* was a live specimen, and you would have thought so if you had been with me when I made the picture. Just as I was ready to snap the shutter he would fly, and then it took a long time to get him in position again. I finally got him on the third trial.

I have taken a number of photos of birds and animals for my collection, and am going to get a telephoto lens, to go with my long focus camera.

Clinton A. Smith, Fredonia, Kan.

PRINTING ON SILK.

Wash the silk in warm water and float for 2 minutes in the following solution:

Salt 10 grains
Ammonium chloride 10 grains
Water 1 ounce
Ammonia 15 drops
Then hang silk up to dry. Sensitize in
Silver nitrate 150 grains
Water 1 ounce

After floating in this for 2 minutes, dry print deeply and tone in ordinary manner.

An apparatus has been invented by J. Landsing, of Brooklyn, which has for its object the development of plates in the field, without the necessity of a dark room. A special plate-holder is furnished, which has means for ejecting the dry plate into a sealed trough, into which can be introduced in succession developing and fixing solutions. This apparatus should prove useful, not only in the field, but in the

home, dispensing, as it does, with the necessity for the dark room and its accompanying inconveniences.

Formula for making plain prints on drawing paper: Salting solution—Chloride of ammonium, 50 grains; gelatine, 100 grains; water, 10 ounces; warm and add 2 ounces of negative varnish. Sensitizing solution: Nitrate of silver, 2 ounces; water, 10 ounces; chloroplatinite of potassium, 15 grains; citric acid, 50 grains; water, 25 ounces. Fixing solution: Hypo-sulphite of soda, 2 ounces; water, 10 ounces. The results are said to be remarkably fine and of black tone.

Will you please give me through RECREATION the best formula for Aristo single and Aristo double toner, used for toning Aristo platino paper?

Ed Francis, Arcanum, O.

ANSWER.

Single: The formula was in August or September RECREATION and is good.

For double toner use: Gold chloride, 1 grain; carbonate of soda, 3 grains; borax, 15 grains; water, 10 ounces. Mix in order named into the water.

Developer as contained in the tubes of "M. Q." (metol-hydrochinon) for Velox papers:

Metol 12 grains
Hydrochinon 48 grains
Sulphite sodium, C. P.
(desiccated) 192 grains
Carbonate of soda, C. P.
(desiccated) 320 grains
Bromide potassium 4 grains
Water 20 ounces

The depth to which the sun's rays penetrate water has been recently determined by the aid of photography. It has been found that at a depth of 553 feet the darkness was to all intents and purposes the same as that on a clear and moonless night. Sensitive plates exposed at this depth for a considerable length of time gave no evidence of light action.—*Revue Phot.*

A German medical paper reports it has been experimentally proved that X rays can be used for the removal of disease as well as for its diagnosis. Experiments have been made by Dr. Reider with astonishing success, cases of chronic eczema and other diseases being cured. If the results are confirmed there will be a much wider field of usefulness for the rays and a greater demand for apparatus.

Don't use mucilage to gum down your prints. Mucilage is—well—nobody knows

*See cover of this issue.

exactly what it is; anyway, it's no good for mounting photographs that you care to keep. Use good paste. If the prepared kind is not handy, make a cream of corn-starch in lukewarm water, throw in red hot boiling water and stir until a good paste is obtained. When cool, squeeze through coarse cotton cloth and it is ready to use.

Why do you put a year's subscription to RECREATION in the last place in your list of prizes? Truly, it seems to me that I'd rather have your magazine than most of the articles of 10 times its subscription price in value. This is not blarney, but straight talk.

Dr. C. P. Robbins, Louisville, Ky.

I save the best of the wine for the last of the feast.

EDITOR.

I had the misfortune to drop my 8x10 camera in a river some time ago, but the only damage done was to my plate-holders, which are Perfection Jr.'s; the heavy paper partitions got wet; they dried full of bulges and wrinkles, and when I try to use them with kits the slides will not go in. Can you suggest a way to restore the partitions to their former shape?

Jas. R. White, Kalispell, Mont.

ANSWER.

I do not believe this can be done. You would better order new holders.—EDITOR.

Please tell me how long to expose an Eastman film to electric light out of doors at night. I wish to take some snow scenes, but have no idea how long to expose.

R. L. Wood, Brooklyn, N. Y.

ANSWER.

An exposure of 5 to 20 minutes is necessary under such circumstances. If the lens is a poor one the time should be at least treble.

Some plates have a strong tendency to frill, even in the developer, especially in hot weather. The subsequent alum bath is then too late to prevent the mischief. Keep a wax candle handy in the dark room and before development run it once around the sharp edge of the plate. There will be no sign of frill, and the alum bath may be dispensed with.

Amateurs annoyed by guttering candles in their dark room lanterns may remedy the defect, says the Photo-Gazette, by immersing the candles in a solution composed of:

Magnesium Sulphate	15 grains
Dextrine	5 grains
Water	500 minims

Don't use hypo the minute it is made,

The addition of the hypo cools the water considerably. If a plate is introduced into freshly made hypo right after developing, it may blister or cut up any sort of shine on account of the change in temperature. Let the hypo stand at least 15 minutes before using.

HINTS TO BEGINNERS.

1. Have patience.
2. Do not snap recklessly.
3. Use a finder accurately centered and marked.
4. Do not work the shutter at a higher rate of speed than necessary, but rather stop the lens.

Do you know that rocking the tray or not doing so makes a great deal of difference in the negative? Well, it does. If you rock the tray constantly the negative will have splendid strength, and if you do not it will be thin, full of detail, but lacking in pluck and crispness. That's a fact! Try it.

Platinotype prints that have become yellow may be retored by placing in a 10 per cent. solution of common chloride of lime. First soak the prints in water, then in the lime solution till the yellow color is bleached; remove and wash well; place in a weak solution of hydrochloric acid; wash again and dry.

Formula for a developer in powder form: Powder A—Metol, 15 grammes; hydrochinon, 40 gr.; eikonogen, 25 gr.; powdered boracic acid, 10 gr. Powder B—Sulphite of soda, 100 gr.; borax, 25 gr.; milk sugar, 25 gr. For use mix 2 parts of A and 4 parts of B in 100 parts of water.

Are the screens used in color photography on the market? If so, what is the price?

A. E. M.

ANSWER.

No. The system has not yet been perfected, and it is doubtful if it ever will be.

Will some of your readers please give their experience in properly washing prints, and describe and explain any devices they may have invented or heard of for keeping prints separated and water changing without doing all by hand?

F. R. Woodward, Lowell, Mass.

I should like to hear from readers who have taken moonlight photos. I have taken photos successfully by daylight, flashlight, moonlight and electric light.

R. W. McBride, Waterloo, Ind.

Keep your developer, fixer and wash water at the same temperature and thereby avoid bubbles and blisters,

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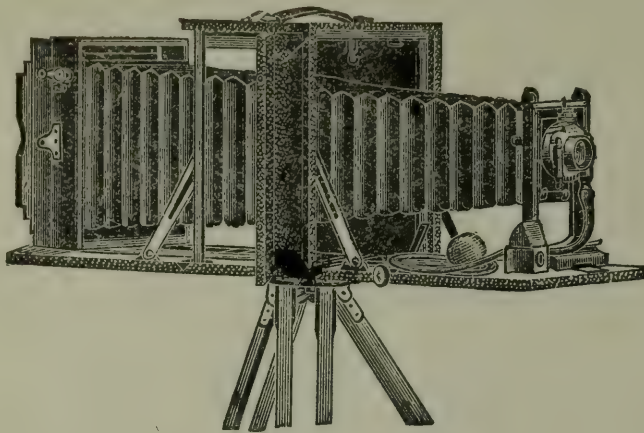
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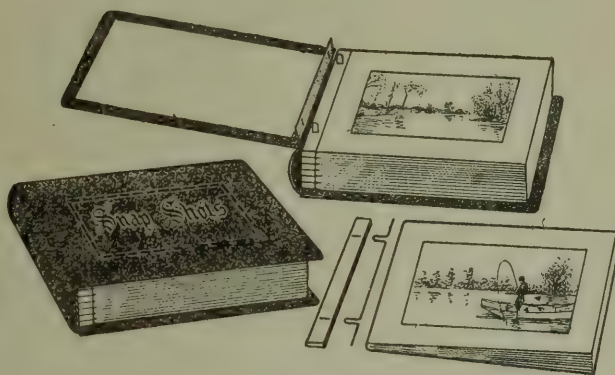
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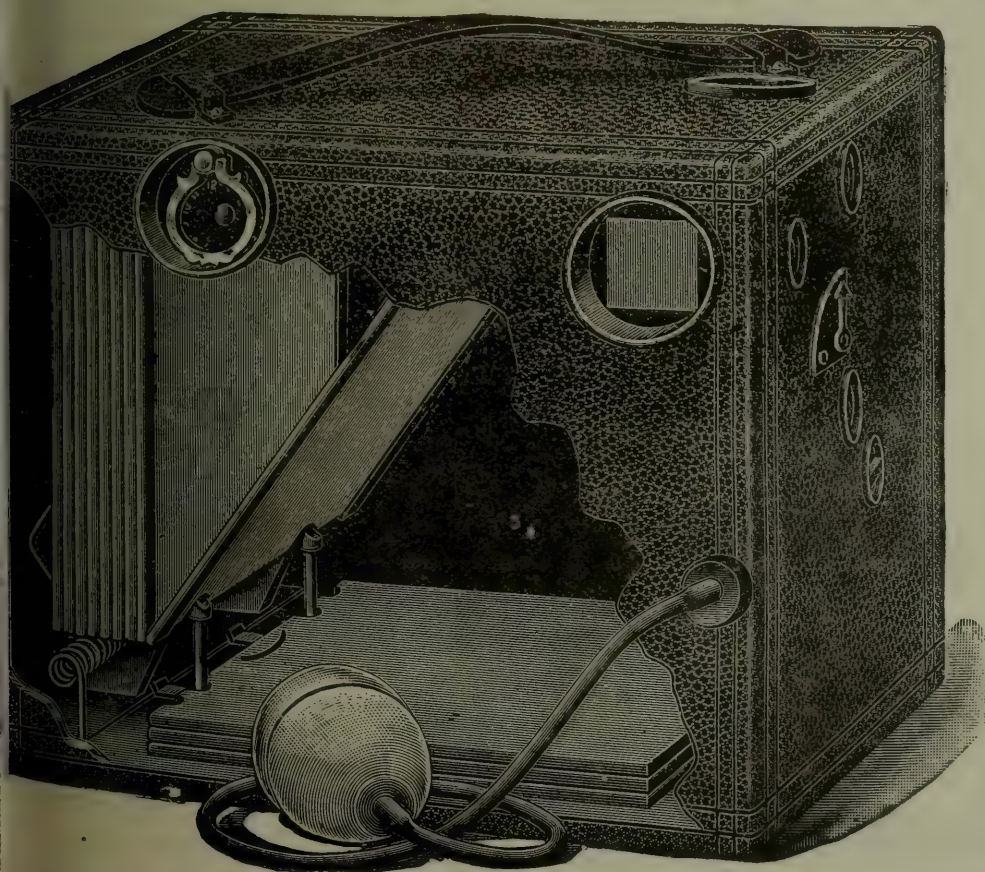


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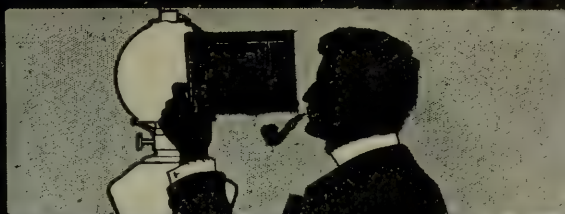
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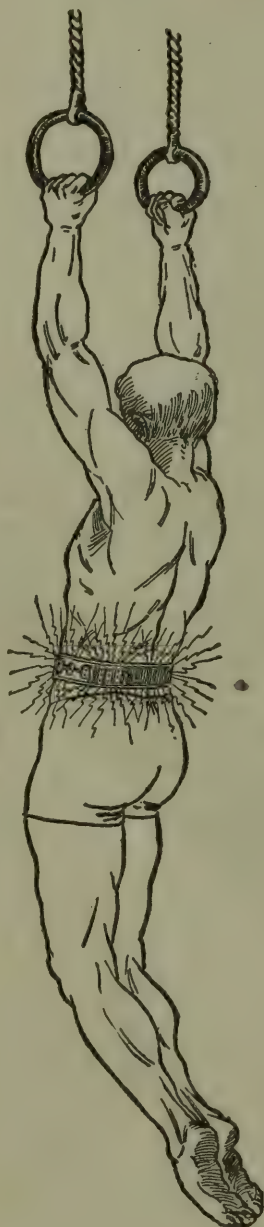
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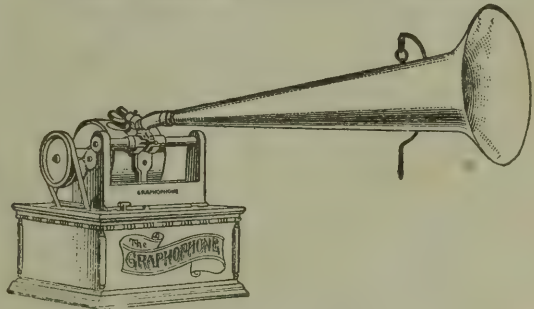
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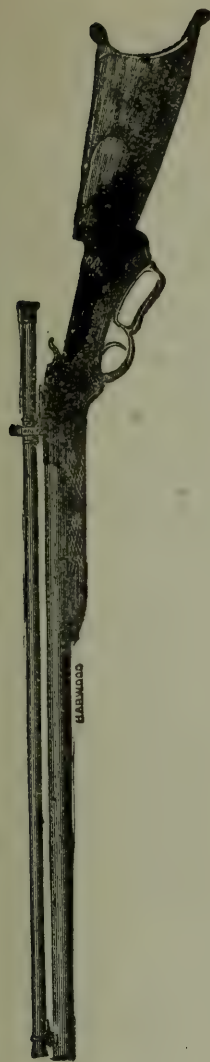
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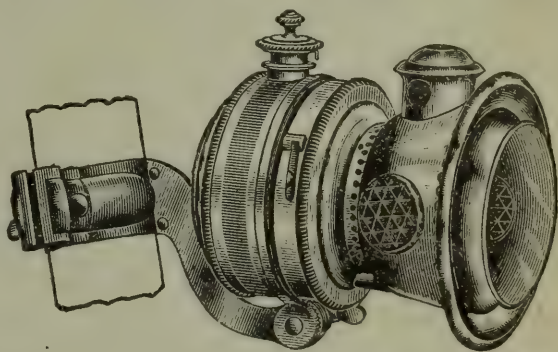
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The official publication of this show is a handsome book of about 170 pages, 6½x10 inches. The cover is an exquisite design by a famous artist, printed in three colors from halftone plates. There are 30 pages of fine illustrations of typical dogs of best known breeds, with articles on their chief characteristics and scale of points for judging. 90 pages contain names of the dogs entered, with their pedigree, list of prize winnings and OWNERS' NAMES AND ADDRESSES.

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NEW ATTRACTIONS FOR THE SPORTSMEN'S SHOW.

A most interesting feature of the coming Sportsmen's Show, at Madison Square Garden, will be the exhibits to be presented by leading railway lines reaching those sections of the country wherein big game still abounds and where the lakes and streams still yield an abundance of game fishes. From Maine to Florida, and from Virginia to the prairies beyond the Mississippi, the resources of the country, from the sportsman's standpoint, will be most attractively and comprehensively represented. The game treasures of that comparatively little known section, the Indian Territory, will be shown in a manner that will surprise even those who have been there.

The Adirondack Hotel Men's League last year made a superb exhibit, and so substantial were the results that the same organization will this year send down even a greater and more comprehensive exhibit than was its predecessor. The State of Maine will this year make an exhibit that promises to eclipse that of 1899. Supplementing the Maine and Adirondack exhibits, and distinctly of the same class, will be the exhibit to be made by the railway companies whose lines penetrate the wonderful State of Florida, which may still be rightfully termed a sportsmen's paradise. This exhibit will be thoroughly typical of the physical character thereof. The weird scenery of the Indian and Oklawaha rivers, with their cypress studded banks and the moss draped boughs of live oak and pine; the limpid pools from which emerge the head and jaws of the slothful but keen-eyed alligator; brilliantly plumaged birds, including the various varieties of the heron family; and last, but not least, the typical Florida pickaninny, in his garb of cheese cloth and wool, will go to make up a realistic scene from one of the most interesting States of the Union.

Another exhibit that will recall many pleasant experiences to sportsmen in the vicinity of the metropolis is being arranged by Mr. Oscar Hesse, of Red Bank. In its day, Barnegat bay has furnished some of the best sport ever enjoyed by Eastern duck shooters, and its resources are still great enough to attract hundreds of New York, New Jersey and Pennsylvania sportsmen every season. Mr. Hesse promises something that will revive old memories in the hearts of all Barnegat bay shooters who see it.

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For Sale:—Pierce vapor launch, 200 foot, nearly new, and has been run 12 weeks; hull made of cypress trimmed with oak. Offered because owner has no use for her. Address Lock Box No. 615, Ripon, Wis.

To Exchange:—A solid gold enameled Odd Fellows' watch charm; handsome pattern; skull at top set with rubies; cost \$15; only worn few times. Will exchange for gun, kodak or fishing tackle.

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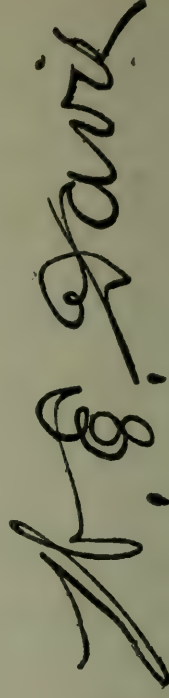
Editor RECREATION

19 West 24th St., New York, N.Y.

Dear Sir:-

You will probably be pleased to know that I have found your magazine one of the best advertising mediums in America. The short notice with reference to our 1899 Calendar, which you inserted in the February issue, has brought in nearly 700 requests, and every morning we still receive letters mentioning RECREATION and asking for a Calendar. I regard the results as almost phenomenal.

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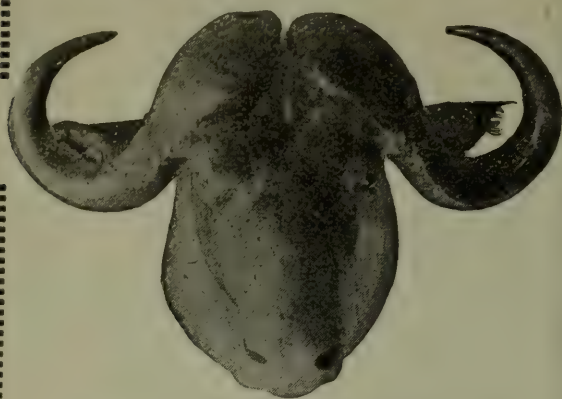
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Last January I stopped at King's ranch, in North Park. The snow was 5 feet deep all over the park, with the thermometer 45 to 58 degrees below zero. If there is a place in Colorado where a sportsman can enjoy himself this is certainly the spot. The scenery is particularly grand, the fishing good, and access easy. Lyons is nestled snugly between mountains on all sides. The St. Vrain river, a splendid mountain stream, furnishes good trout fishing, and flows through the center of our little town. Large deer were killed during the past winter only 3 miles from town. Long's peak, one of the giants of the Rockies, is easily accessible in one day.

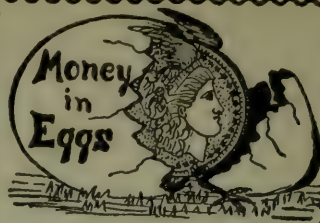
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The "Get There" duck boat, made by W. H. Mullins, Salem, O., which you sent me as a premium for subscribers to RECREATION, came to hand promptly. Am delighted with the running of it. Can fully recommend the boat to all sportsmen and trappers as being far superior to wooden boats for hunting, etc. Thank you for giving so much for so little.

J. A. Warner, Albany, Ore.

Many flocks of mourning doves resort to the vicinity of Hastings Center, N. Y. Associated with some of the flocks are bunches of 5 to 20 passenger pigeons. Last August they were plentiful and unusually tame. H. E. Loftie, Syracuse, N. Y.

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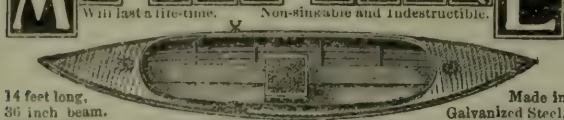
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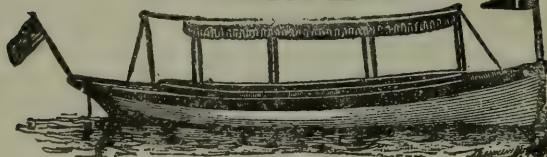
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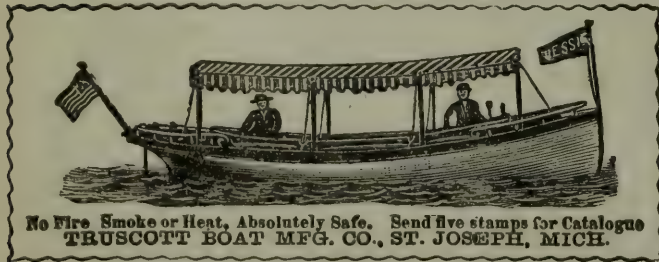
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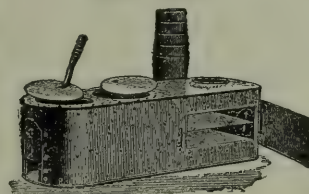
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I am an Englishman, living here for the yachting, and am a member of the Norsk Yacht Club. Any gentleman wishing such an opportunity, please write G. Wright, Bero, Kragero, Norway.

To Lease:—For short or long term, 22 acres of land, within 10 minutes of Baychester Station, 25 minutes' ride from New York City. A part of this land is tide meadow, but it includes an island of about 3 acres, covered with large, native oak trees. There is a tide of $8\frac{1}{2}$ feet running through channels on either side of this island, so that the property offers an admirable site for a boat club, gun club or a rifle range. Butts can be erected so as to give a range of 600 yards, and there are excellent opportunities for trap shooting. Address J. H. Campbell, Baychester, N. Y.

Wanted:—A good shot gun. Will exchange or sell Stevens Hunters' Pet, .25-40, rim fire; new. Address C. E. Farr, 1 Kent Hall, New Haven, Conn.

A COLOSSAL WOLF FIGHT.

W. F. SHORT, JR.

"Poodle" McDonald was the owner of a dog that used to sit down and howl dismally every time the church bells rang, and he would also manifest his distress in a similar way when he heard a piano. One day when Poodle and his dog were with "us boys" the church bells began ringing, and thereupon the dog lifted up his voice in plaintive lamentation. This precipitated discussion as to the influence of music on animals. Old Man Stice usually closed our debates, and on this occasion he did so by telling of a fight between 1,000 wolves who were incited to frenzy by the notes of his fiddle, which he was playing in his log cabin.

"I fiddled an' they fit and e't each other ontill the band begun to thin. Every time I give a extry rasp on the E string they howled louder an' pitched in afresh. They kep' this up fer 3 good hours, when thar warn't mor'n 50 of 'em left alive, an' they wuz so blamed full they could hardly waddle. But I fiddled an' they fit fer a second wind. When one throwed up the sponge the others bolted him in a twinklin'. Bimeby thar warn't more'n a dozen left. But I fiddled an' they fit an' feasted. When they finally got down to 3 each one laid holt of another tail an' chawed fer glory. The ring kep' gittin' smaller, but I still fiddled, an' they fit an' chawed ontill thar wuz only a leetle bunch of ha'r lef', an' thet blowed away down the hill. The snow wuz all red with blood, an' hed been tromped down at least 10 foot. Heads an' bones wuz strung all down the canyon, an' thar was enough fur in sight to stuff a circus tent. It wuz the dandiest fight I ever see."

For Sale or Exchange:—One red fox, 2 years old; large, handsome and tame. Also 1899 Hornet bicycle, new last July; cost \$55; handsome wheel, in good repair. D. D. Lamb, East Calais, Vt.

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THE
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FULLY
GUARANTEED.

The Ingersoll Dollar Watch is worn by every judicious sportsman on outings instead of the Hundred Dollar one, because even if it is injured a dollar does not break him and besides it keeps better time under rough usage than the most expensive—that is an indisputable fact; it's a beauty too.

Sold throughout the country by over 10,000 dealers or sent postpaid in U. S. and Can. by makers for \$1.00. Address Dept. 77.

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"The Handiest Tool a Sportsman
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Large enough to fell a tree, and small enough to sharpen a lead pencil. Our new booklet, "The Story of an Axe," lots of interesting facts about the axe and its use, free for the asking. Made in two styles. : : : : :

PRICES—Steel and Hard Rubber
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No. 1—11 inches, 18 ounces, . . .	\$2.50
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Wooden Handles.	
No. 4—12 inches, 18 ounces, . . .	\$1.50
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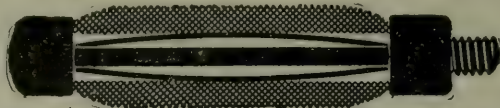
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BECAUSE you should clean your barrels inside not only after shooting, but now and then when not in use. They "pit" from just this neglect-

BECAUSE those streaks of lead and rust must be removed if you don't want trouble and expense of sending barrels to the factory for costly repairs. (A close examination will often reveal lead streaks or rust).



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BECAUSE the TOMLINSON has a simple, common sense principle, using brass wire gauze (wrapped over wood), sides which are hard enough to cut all foreign substance from the barrels, yet too soft (brass) to injure them in any way.

BECAUSE the TOMLINSON will last *forever*, as sides can be replaced when worn (they will clean a gun a great many times) for 10c. a pair. Tomlinson encloses an extra pair of sides, also tool for rag with each cleaner. Fits all rods. Gauges 8 to 20. Price \$1.00. Any dealer or prepaid by mail. Send postal for booklet telling more about the Tomlinson; also what such experts as Fred Gilbert, Chas. Budd, Ed Fulford and others have to say about the best, cheapest and most popular cleaner in the market.

USED EVERYWHERE IN THE CIVILIZED WORLD

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LAWLESSNESS IN MINNESOTA.

Bowling Green, O.

Editor RECREATION:

I was pleased to see the exposure made by Dr. Austin, of Minneapolis, in July RECREATION. I had intended to do the same thing on my return from the Itasca country last November. I considered it a duty to sportsmen who go there to find their prospects for lawful sport spoiled by such butchers.

At the Deer River hotels, 20 days before the open season on moose, we were served with beefsteak that grew in a moose hide, and the soldiers camped there told us this had been their meat diet for weeks before. When we reached the Bow String country, farther North, we found we had long been preceded by fellows who had hunted with guides and dogs until legitimate sport was "nowhere."

A party of 20, from the Indiana gas belt, camped near us, led by a gun club man named Fitzpatrick. Meeting with no success, they hired a local guide with his dogs at \$2 a day. They captured 2 deer in this way, and of course made themselves liable to arrest and punishment. No one seemed to be taking any notice, however. This was and no doubt is to-day the shameful situation in one of the finest game and fish preserves in the United States. I cannot understand why the sportsmen's organizations of Minnesota do not take a more aggressive interest in enforcing the law. They certainly have a powerful and fearless ally in RECREATION, whose monthly visits should be an inspiration to every true sportsman to lend a hand in protecting game.

C. W. Evers.

"Ah! Angelica, if you only knew how I love you you would not be so formal with me. Call me Fred, darling; call me dearest!"

"I am sorry, Mr. Softly," replied she, "but the best I can do for you is to call you down."—Baltimore News.

IDAHO NOTES.

Carp are abundant in the Snake river and seem to thrive as well in its clear, cold waters as in the warmer and muddy streams farther East. I saw large numbers taken with hook and line last summer.

At Weiser, on May 16th, in the presence of the governor and many distinguished guests, was driven the first spike on the railway to Seven Devils mountains. This road will open to sportsmen some of the finest hunting grounds in Idaho, hitherto almost inaccessible. Near its grade through Middle and Council valleys I saw hundreds of sage hens and grouse; also some ruffed grouse and numerous cranes. The latter breed in these mountain valleys in large numbers.

The recent rifle match at Weiser was won by Dr. Curl with a straight score of 100. Four other contestants made scores of 99 out of a possible 100, and one other made 98. The shooting was done with Stevens and Winchester rifles and Idaho nerve. Reduced range, 100 yards.

State Game Warden Arbuckle should have the hearty support of every sportsman in Idaho. Have posted him in regard to the slaughter of deer at the licks on Sulphur creek, and hope he can bring the guilty parties to justice.

On the trail I met Dan Leach, of Warrens, with a pack train of 23 mules and 7,200 pounds of freight. He reported the salmon fishing on the South fork of Salmon river unusually fine this spring. In no place in the West is there better salmon fishing with baited hook and line than there. Some of the fish taken weigh over 30 pounds.

M. W. Miner, Cuprum, Ida.

Servant—Shall I leave the hall lamp burning, ma'am?

Mrs. Jaggsby—No; Mr. Jaggsby will not be home until daylight. He kissed me 5 times before he left this morning and gave me \$20 for a new bonnet.—Chicago News.

Tremendous Muscular Force, Endurance, Energy and Alertness

QUICKLY ACQUIRED BY THE USE OF THE

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“THE CLUB WITH LIFE IN IT”

Nothing ever used or conceived like it! Concealed weights and springs, plunging and bounding as it is swung, make the exercise like wrestling with a live thing. You CAN'T use it, like other exercises, in an indifferent, half-hearted way. It brings out all your muscle and mind. Gives robust health, magnificent development, grace and celerity of movement. The club is “a beautiful piece of work,” aluminum, nickel and polished steel.

Illustrated circular with introductory prices mailed on application.

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Kindly refer to RECREATION

ALL-AMERICA ROAD TO THE KLONDIKE.

Captain W. R. Abercrombie, U. S. A., who in the spring of 1898 was appointed the head of an expedition to explore and report on all routes from the Pacific coast to the interior of Alaska, has returned to this city after an absence of nearly 2 years. He has laid out a new and much shorter route to the Yukon Valley gold fields than has heretofore been made. It will obviate the necessity of crossing Canadian territory.

Captain Abercrombie employed a force of 400 miners in laying out a new military road from Port Valdez to Eagle City, on the Yukon river, a distance of 200 miles. The old route from Dyea, through the Chilcoot pass, to Lake Bennett, thence up the Yukon to Dawson, covers 575 miles. A route which was contemplated but was given up as impracticable was from St. Michael up the Yukon to Dawson, a distance of 2,100 miles.

“The route I have finally decided on,” said Captain Abercrombie, “and the one on which I have done considerable work, is by steamer to Port Valdez, thence by the new trans-Alaskan military road to Eagle City, or Fort Egbert, as it is called, on the Yukon river. Fort Egbert is only about 70 miles from Dawson, and the entire distance by this route from Port Valdez to Dawson is only 270 miles. The country

through which the road is cut is of a fairly even grade, the rise being only 2,600 feet in 30 miles.

“This route is entirely free from glaciers, and is well timbered the entire distance. There is good grazing for cattle and for horses or mules. This route opens up the heart of Alaska and permits the American people to travel over their own domain without coming in conflict with the officers of a foreign nation. It shortens the route by about 200 miles. The snow on the coast is heavy, but it is light in the interior. There is good timber, and the grade is much less than by any other route.

“During the coming year numerous enterprises will be embarked in Alaska, and especially in the Yukon country. The country to be opened to settlement is fully twice as large as the New England States, and will support thousands of persons. The water is good, the soil fertile, game abundant, except on the Copper river, and all hardy grains, such as are raised in Siberia, may be raised along the line of this all-American trail. In packing grains for the use of the pack animals some were scattered along the trail last year, and this year we had a voluntary crop of matured oats. We also had potatoes 3 inches in diameter and 5 inches long. In my experimental garden at Valdez I raised peas, carrots, turnips, lettuce, radishes and other garden stuff.”

(38)

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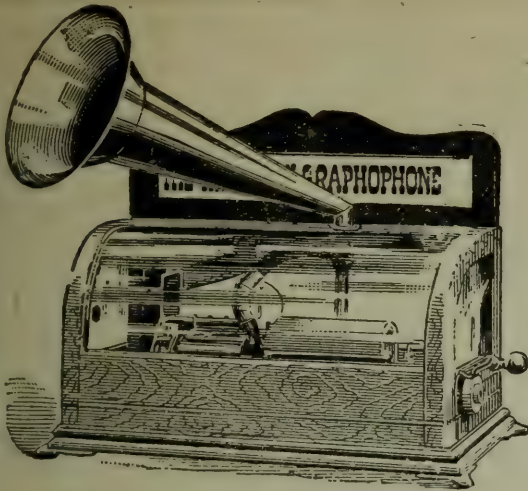
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There is another alleged sportsmen's magazine that claims a circulation of 83,000. Ask the publisher to show you his order from the News Company, and see whether you get it.



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I am in thorough sympathy with the cause of game protection in all its phases. The fish and game in my locality are so scarce a game hog can not develop, but we are doing what we can to increase and protect our song birds.

Jas. H. Hoadley, So. Woodstock, Vt.

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A HIGH-GRADE BICYCLE FOR 50 SUBSCRIPTIONS TO RECREATION

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RECREATION is the best sportsmen's journal published. Formerly I did not know why it was not right to hunt and kill all the game possible, but RECREATION explains all and makes one hate the game hog.

J. B. Crozier, Minneapolis, Minn.

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After Doing So Take One of Stuart's Dyspepsia Tablets, and Indigestion Will Not Trouble You.



Stuart's Dyspepsia Tablets contain vegetable and fruit essences, pure pepsin, Golden Seal, ginger and other valuable remedies, making the safest and most reliable cure for indigestion, sour stomach, gas, distress after meals, constipation. Prepared for stomach troubles only—should be taken after meals and carried in the pocket to be used whenever there is any trouble with the digestion.

It will cost 50c to find out just how much Stuart's Dyspepsia Tablets will help you. Try them—that's the best way to decide.

All druggists sell them. A little book on stomach diseases will be mailed free by addressing F. A. Stuart Co., Marshall, Mich.

Members of the L. A. S.

can buy tickets to the

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at **25c.** each

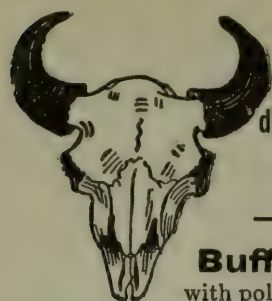
$\frac{1}{2}$ the regular price of admission

How many will you have?

Let me know at once, so an order may be placed with the manager in time to have them printed.

G. O. SHIELDS, Pres't,
23 West 24th Street, N. Y.

If you have not yet ordered a set of the Hudson pictures, illustrating the poem "To My Gun," you should do so at once. Only a few sets were printed, and about half of them have already been sold. No more will be printed, as the plates were too much worn in running the November edition of RECREATION to make any more good impressions. Only \$1 for the 5 full page artist's proofs. Nothing finer could be found at the price, for decorating an office, a dining-room, a parlor or a den.



Relics of a disappearing Race.

Buffalo Skulls
with polished or unpolished
horns.

Also polished or unpolished horns in pairs or single. Polished horns, tipped with incandescent electric lights. These are a decided novelty and are in great demand for sportsmen's dens, offices, club rooms, halls, etc.

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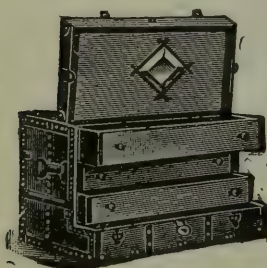


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RECREATION will be located in spaces 26 and 27 at the forthcoming Sportsmen's Show, Madison Square Garden. These spaces are at the right hand end of the stage, and command a fine view of the artificial lake. There will be room for 100 of my friends at any time, and at all times, and I trust there may never be a foot of vacant space in my booth during the 2 weeks of the show. I shall have on exhibition a new series of drawings by Ernest Seton Thompson, Captain Charles B. Hudson, Carl Rungius and other well-known artists. Also a series of new and striking paintings of big game animals, by Mr. Rungius. Come in, shake hands and let us swap lies.

Don't forget that League members can buy tickets to the Sportsmen's Show, for themselves and their families, at 25 cents each. Let me know how many you want.

Is Your Gun Worth Saving?

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The Gun Bore Treatment

WILL SAVE BOTH

It is an absolutely effective and permanent protection against the **Rusting, Pitting and Leading** of the bore of Firearms.

Stop Cleaning Your Gun!

If this interests you, write to the

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Drye—I suppose his idea is that most men will have sense enough then to keep from writing it at all.—Indianapolis News.

A Commercial Visible Typewriter, listed at \$50, for 50 yearly subscriptions to RECREATION. This is a well made, durable and practical machine, and it does good work. You can get the subscriptions in 2 days, in any live town. Let me hear from you.

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A Hudson Fishing Tackle Cabinet**FOR 10 YEARLY SUBSCRIPTIONS TO RECREATION**

This offer is made possible only by the fact that I have secured several of these cabinets on very favorable terms.

They are well made, handsomely finished, with compartments, racks, drawers and shelves for guns, loaded shells, empty shells, reloading tools, bullets, shot, wads and primers. Or for fishing rods, landing nets, reels, hooks, fly books, rubber boots, and everything else that goes to make up a complete hunting or fishing outfit.

These are excellent specimens of workmanship and handsome pieces of furniture. They are an ornament to any library, dining room, office or den, and every sportsman who has a home should have one of these cabinets.

Sample copies of RECREATION for use in canvassing will be supplied.

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Are you planning a hunting trip for next summer or fall? If so write me. I have a complete packing and camping outfit for several men; also an ample supply of horses, saddles, etc.

My ranch is in the foothills of the Big Horn Mountains, where elk, deer, bear and antelope may still be found in fair numbers. Also fine trout fishing. Rates reasonable.

References:

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Scenery on route from here to Park finest to be seen on any trip in the mountains.

Address Geo. B. McClelland, Red Bank, Wyo.

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For S. E. Alaska, Cook's Inlet and the Alaska Peninsula

Moose, Caribou, Mountain Sheep, Mountain Goat, Bear, Deer, Shore Birds and Waterfowl

Information furnished as to Mill Sites, Timber, Locations for Salmon Canning and Trapping

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References: Lieut. G. T. Emmons, U. S. Navy, Navy Dept., Washington, D. C.; Hon. Will D. Jenkins, Sec. of State, Olympia, Wash.; G. O. Shields, Editor RECREATION.

Readem—I read in a medical paper the other day that a man is shorter at night than he is in the morning.

Flyboy—That's funny. It's just the opposite with me.—Baltimore American.

**IN ANSWERING ADS ALWAYS
MENTION RECREATION.**

RECREATION

will be located in
Spaces 26 and 27
at the forthcoming

Sportsmen's Show**MADISON SQUARE GARDEN**

These spaces are at the right hand end of the stage, and command a fine view of the artificial lake. I shall have room for 100 of my friends at any time and at all times; and I trust there may never be a foot of vacant space in my booth during the 2 weeks of the show. I shall have on exhibition a new series of drawings by

ERNEST SETON THOMPSON**CAPTAIN CHARLES B. HUDSON****KARL RUNGIUS** and other well known artists

Also a series of new and striking paintings of big game animals by

MR. RUNGIUS

Come in, shake hands and let us swap lies.

Don't forget that League members can buy tickets to the Sportsmen's Show, for themselves and their families, at **25 cents each**. Let me know how many you want.

The 2 old friends met again, after years of separation.

"By the way, Gagster," said Throggins, "do you remember that snub-nosed, cross-eyed little Tilbury girl, with a face on her that would ditch an express train? She used to live somewhere in your neighborhood, I think."

"Oh, yes, I remember her," replied Gagster.

"What ever became of her?"

"I am sorry to disappoint you, Throggins"—here is where the variation comes in—"but I have not the slightest idea. I didn't marry her!"—Chicago Tribune.

"I have noticed," said Rev. Dr. Goodman, pausing in his discourse, "that 2 or 3 of the brethren have looked at their watches several times in the last few minutes. For fear their timepieces may not agree, I will say the correct time as a quarter to 12. I set my watch by the regulator last night. The sermon will be over at one minute past 12. It would have closed promptly at 12 but for this digression. Let us proceed to consider now what the apostle means when he says 'I press toward the mark.'"—Chicago Tribune.

The American News Company,

39 & 41 Chambers St.,

New York.

Manager's Office,

Dec. 15, 1899.

Mr. G. O. Shields,

23 West 24th St., City.

Dear Sir:-

Replying to your note of yesterday, beg to say that the Puget Sound News Company takes 800 copies of RECREATION on standing order.

Yours truly,

The American News Company.

This is only one of the 36 branches of the American News Company. The others do equally well with RECREATION.



Double Ender Pleasure Boat

You will soon make your preparations for Summer Vacations. Send for a catalogue of Mullins' Metal Boats and study it thoroughly

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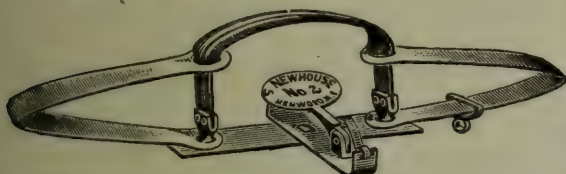
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The best in Scientific Reel Construction. Best that money can buy. Lands a 7-pound fish easier than the old kinds land a 3-pound.

Send for Free Booklet to

W. H. Talbot, Nevada, Mo.

GAME LAW VIOLATORS.

Game constables in Cattaraugus County are doing good work in exterminating violators of the game laws. A short time ago James Krestetter, of Bradford, one of the crack shots of Pennsylvania, dropped into Great Valley on a grouse hunting expedition. In 2 days his bag showed 30 birds, which he carried with him to Bradford.

Since then the game protectors of Great Valley have been on the lookout for him, and when he returned a few days later to get a bag of rabbits he was promptly taken in hand by Game Constable Salisbury, who invited him to Ellicottville, where he was introduced to Justice J. K. Ward. The justice thought \$50 was about the value of the grouse taken out of Great Valley. Krestetter acquiesced in that opinion and paid the \$50, returning to Bradford on the next train, full of the opinion that home grouse were good enough for him — *Buffalo Express*.

SMALL PROFITS

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15c for an assorted sample doz. Regular Price, **24** cents.

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60c for an assorted sample doz. Regular Price, **84** cents.

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SPLIT BAMBOO RODS

Fly Rods
10 feet, 6 ounces

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WITH CORK GRIP

Try our New

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METAL CENTRE LINE

Size No. 5, $4\frac{1}{2}$ c per Yard

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FRANKFORT-KENTUCKY

REEL—That's all.

It's the only **real** reel—not a substitute. Sporting catalogue, No. 10 free.

B. C. MILAM & SON, Frankfort, Ky.

Simkins—Cheer up, old man. There's just as good fish in the sea as ever were caught.

Timkins—Perhaps there are; but what's a fellow to do when he's out of bait?—Chicago News.

HAVE YOU A FRIEND
ANYWHERE IN THE WOODS,
IN THE MOUNTAINS
OR ON THE FARM,

WHO LONGS FOR SOMETHING TO READ
IN THE LONG WINTER EVENINGS, OR IN
THE LONG SUMMER DAYS?

SEND HIM RECREATION.

IT WILL PLEASE HIM A WHOLE YEAR
AND HE WILL RISE UP AND CALL YOU
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AND IT ONLY COSTS YOU \$1.

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WILL KINDLY MENTION REC-
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JOHN W. SIDLE

Telescopic Sights for Rifles

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Yours truly,

John W. Sidle,
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UNEQUALED
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ON THE LINE OF THE

Union Pacific FOR TOURISTS

It traverses the Grandest Scenery of the
 Rocky Mountains, and reaches all the
 Health and Pleasure Resorts of the Mid-
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Sportsmen will find in scores of localities
 along this line game worthy of
 their skill, such as Bear, Moun-
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 tain Sheep, Feathered Game of all kinds. And
 everywhere are Beautiful Streams well stocked
 with Trout.

For any information relative to localities for Hunting,
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The Chicago, Milwaukee & St. Paul
 railway is issuing a series of booklets
 regarding points of interest along its
 lines, and if you are interested in the
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 trip, write GEO. H. HEAFFORD, Gen-
 eral Passenger Agent, Chicago, Ill.,
 for the special publication desired,
 enclosing four cents in stamps for
 postage.

- No. 1. The Pioneer Limited.
- No. 2. The Land of Bread and Butter.
- No. 3. The Fox Lake Country.
- No. 4. Fishing in the Great North Woods.
- No. 5. The Lake Superior Country.
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- No. 7. Glimpses Across the Sea.
- No. 8. Summer Days in the Lake Country.
- No. 9. Summer Homes, 1900
- No. 10. The California of To-Day.
- No. 11. The Game of Skat.
- No. 12. Milwaukee, the Convention City.
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AN

AMERICAN

TRAVELER.

"I would not have believed that there could
 be such luxury in a thousand-mile journey as
 I found on the New York Central, between
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 American who had spent the past fifteen
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For a copy of "The Luxury of Modern Railway
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AND NEW PATENT PUTTEE

*For Golfing, Shooting, Hunting,
Riding, Bicycling, Fishing, etc.*

The **Puttee** entirely supersedes leggings and golf stockings, and can be worn over trousers.

The **New Puttee** is so designed as to wind on spirally from ankle to knee, and to fit closely to the leg with even pressure without any turns or twists. **No buttons.**

The **Spat-Puttee** is made to fit any size boot or shoe.

No measurements required.
All wool and water-proofed.
Easily dried or cleansed.

Patent Puttees, \$3 per pair

(Without Spats)

Patent Spat-Puttees, \$5 per pair

Write for illustrated circular and shade card. Sold at all leading Stores, Outfitters, Tailors, etc., or sent direct, on receipt of price, by

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Canal Street, New York.*



IN THE FAR-OFF ISLANDS OF THE PACIFIC

Agents of the New York Central Lines are arranging for travel across this Continent via Chicago, St. Louis and Cincinnati to New York and Boston, in connection with the great Ocean Ferries. No other American line stands so well at home or abroad as the

"NEW YORK CENTRAL."

For a copy of the "Luxury of Modern Railway Travel," send a 1-cent stamp to George H. Daniels, General Passenger Agent, Grand Central Station, New York,

We sportsmen chuckle complacently whenever you roast a game hog; but how many of us put our own hands to the plough? We sit around and howl for somebody to do something, but how many of us ever prosecuted a game-law breaker?

I have traveled a trifle, and never yet found a place where the enforcement of the law, as regards small game at least, was not an absolute farce.

I will gamble that I can shoot quails in August in any town in Westchester or Putnam counties—where I can find them—and exhibit the birds in the nearest bar-room with perfect safety. Not one person in 10 knows what the game law is. Our misrepresentatives at Albany patch and tinker the law annually, until none but a lawyer could keep track of it. I doubt if there are many sportsmen above the poker grade, among our Solons, though I once saw a party of them hunting gin-rickies on Broadway with great perseverance and evident success.

Now, let us not be too complacent; few of us cut much ice on the game protection pond, though we may enjoy seeing some one else work.

G. A. M., Pleasantville, N. Y.

Frisco Line

**St. Louis and
San Francisco
R. R. Co.**

for the hunting and fishing grounds
of

Arkansas

—and—

Indian Territory

**A perfect paradise
for Sportsmen**

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G. P. A., St. Louis, Mo.

S. B. FRANKLIN

G. E. A., 385 B'way, New York

IRON MOUNTAIN ROUTE

Is the Line to take from
ST. LOUIS, CAIRO OR MEMPHIS
IF YOU ARE GOING
SHOOTING OR FISHING

THE BEST GAME COUNTRY in the
Mississippi Valley to-day is
along this Line in

MISSOURI, ARKANSAS AND LOUISIANA.

SMALL GAME is very abundant
and has been shot at very little. **DEER**
and **TURKEY** are plentiful and the fish-
ing for black bass and other game fishes
of the very best. **THIS LINE** also
reaches direct from **ST. LOUIS** or
MEMPHIS by double daily through
car service, the famous hunting and
fishing grounds of Texas and the Gulf.

For further information write any
Agent of the Company, or

H. C. TOWNSEND,
GENERAL PASSENGER AND TICKET AGENT,
ST. LOUIS, MO.

Those counterfeit sportsmen who cannot pass fur, feather or fin, be it chipmunk, robin or squaw fish, without raising their hands to kill ought to emigrate. In Australia, where rabbits, hares, foxes, weazels and even sharks have become so numerous as to menace the welfare of the community, men are constantly employed to keep down the pests. In my time standing rewards, amounting to about \$180,000, were offered by the various colonies to any one who could devise a safe cure for the rabbit pest. At our station rabbits were so numerous we paid \$60 a month and board to our trappers. I therefore suggest that all game hogs go to Australia and grow rich on their crimes. They can shoot until their gun barrels are too hot to hold. There is, however, another way to get rid of them which seems feasible. Let them be rounded up and shot—through the stomach, for they have no heart nor brains.

Stanley Mayall, Cascade, B. C.



A Ticket

A railway ticket purchased to-day should carry with it a promise of something more than the right to a trip over the line represented therein.

It should assure:

As great a degree of safety as modern methods in train operation and improved equipment have made possible.

Comfort, through a careful regard as to the character of its trains, roadway, track adjustment, car cleanliness, heat, light and sanitation.

Modern conveniences; punctuality in time of trains; reliable connections.

These conditions the Lake Shore & Michigan Southern Ry. endeavors to fill to the fullest possible extent. Its large and increasing patronage, and its regular use by experienced travelers bear witness of appreciation.

It is unequalled for travel between Chicago, Cleveland, Buffalo, New York and Boston.

"Book of Trains" tells about it; sent free anywhere.

A. J. SMITH,

G. P. & T. A., Cleveland, O.

Worcester Mass. Feb. 5. 1900

My dear Mr. Shields : —

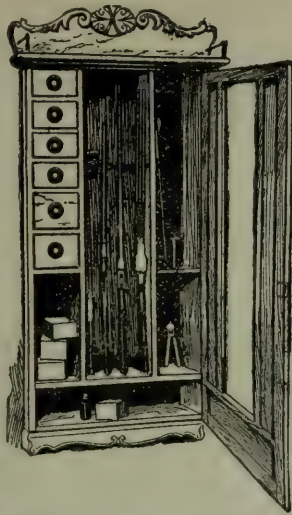
I wish I had the ear of every
'doubting Thomas' in the land that I
might demonstrate the value of Recreation
as an advertising medium among sportsmen.
My own ^{little} experience has been an eye-opener.
^{'For Sale'}
An inconspicuous advertisement has brought
some 3 dozen answers, I have sold my
gun, could have sold 3 or 4 more &
applications are still arriving.

I have had some experience with the
other sportsmen's magazines and I
^(on any fair)
know there is not one that reaches
so many buyers as Recreation.

Your rates are low, ^{with a} distributing
field of the entire U. S. & Canada,
^{and north}
~~and~~ I do not wonder at the result;
~~now~~ but I could not have believed
it without my own experience —
Yours Truly E. Russell

It's A Fact

That we are selling hundreds of our popular Gun Cabinets, and can refer you to satisfied customers in nearly every state East of the Rockies.



A Florida Customer Writes:

I wish to thank you for the care taken in packing the Gun Cabinet sent me, as it made the long journey and arrived in perfect condition. I am also very much pleased with the Cabinet itself and consider it an excellent article for the price. W. W. K. Decker, Tarpon Springs, Fla.

Our new designs combine artistic beauty with exceptional usefulness. Catalogue of four styles free.

G. S. HUDSON & SON,
Ellisburg, N. Y.

I take great pleasure in reading your magazine, especially your Guns and Ammunition department. I consider the .38-55-255 the best all around repeating rifle made.

Game is plentiful here. I spent Christmas week in Chesterfield county hunting deer, with my brother. The first day we killed 4 and wounded 2. We also had good turkey hunting. Our total kill was 9 deer, 23 turkeys and 170 quails. I had some good pictures taken of them, and will send you one if you would like to have it. I expect to go again before the season is out, and this time hope to kill enough game to last the farmers in the vicinity 6 weeks.

S. O. S. Graham, Richmond, Va.

You and your brother should be heartily ashamed of yourselves for having slaughtered game to this extent. Two deer and 3 or 4 turkeys is enough for any man to kill, in one season, and no reasonable man would wish to kill more. I am astonished that you should have planned another raid on the game, after having been so wasteful of it in this instance. I trust that on further reflection you may realize you have acted unjustly, and that you will never commit another such slaughter.—EDITOR.

Look out for the new

Tubular and Telescoping Flies and Corrugated Celluloid Fly

Books at the Sportmen's Show in March

Manufactured by **THE TUBULAR FLY CO., NEW YORK**
53 McDonough St., Brooklyn Borough

RECREATION IS FURNISHED TO MEMBERS OF THE L. A. S. AT 50 CENTS A YEAR. SEND \$1.50 AND YOU WILL BE ENROLLED AS A MEMBER AND WILL RECEIVE THE MAGAZINE REGULARLY FOR 12 MONTHS.

I received your premium of a 2-pound can of Laflin & Rand powder, and it is A number one. For penetration and cleanliness this powder is unsurpassed.

G. M. Pflug, Springfield, Neb.

The ad of the West End Furniture Co., Williamsport, Pa., in RECREATION, caused me to be the surprised and happy recipient of a splendid gun cabinet—a present from my wife—last Christmas. It is an ornament to our home and is very convenient.
Chas. F. Emmel, Vandalia, Ill.

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GOLF GOODS

SPECIALTIES

FORK SPLICED CLUBS
(PATENTED)

SOCKET CLUBS.

EVERYTHING PERTAINING
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Write for catalogue with
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THE BRIDGEPORT GUN IMPLEMENT CO.

NEW YORK 313 BROADWAY BOSTON 408 WASHINGTON ST. PHILADELPHIA 1028 CHESTNUT ST.

Shakespeare Reel



I knew he was a "good one" and after the manner of many large fishes (and most small men) he "sulked," went straight to the bottom and laid perfectly still. I braced myself, rested the butt of my rod against a convenient part of my anatomy and then "yanked" him sharply. Phew! how things changed. In an instant he dashed straight for the boat like a "Mauser"

bullet, and the way I fondled my reel-crank was not exactly lethargic, and as I was using a *Shakespeare Quadruple Multiplier* I had no trouble whatever in taking up the slack as fast as he furnished it (which was fast). Of course I was excited—a 5½ lb. bass is not an hourly occurrence here, but my "Shakespeare" kept perfectly cool, and distributed the incoming line along its spool as uniformly as the thread upon a spool of store cotton. I never dreamed that such a reel existed, until I tried the "Shakespeare," and I think it would pay you to "look it up." Address

NO 1.

Wm. Shakespeare, Jr.,
Kalamazoo, Mich., U. S. A.

F. J. MAULE, PHILA.

THE AUTOMATIC-COMBINATION FISHING REEL.

Winds the line automatically by the action of a spring controlled by the little finger of the hand holding the rod.

CHANGED INSTANTLY
from Automatic
to Free-Running.

The
Little
Finger
Does
It.



NEVER
ANY
SLACK
LINE.

YAWMAN & ERBE MFG. CO.

Rochester, N. Y.

Send for Catalogue. Dept. X.

Women As Fisherwomen

Now-a-days, the fisherwomen (Heaven bless 'em) are in evidence; and many of them, adepts in the art of casting the fly, can give the fishermen "points" that are eye-openers.

Perhaps it is the more delicate hand that does the "trick," or else they are more apt pupils. In any event, the BRISTOL Steel Fishing Rod is calculated to interest fisherwomen as well as the sterner sex, and we will be extremely pleased to forward—free of all expense—our new catalogue to any FISHERWOMAN.

The Horton Manufacturing Co.

Specify Cat. "R"

BRISTOL, CONN., U. S. A.

This is the Only Way

People Talk
Who are Using

ITHACA GUNS



Randolph, N. Y., Jan. 1, 1900.

The Ithaca Gun Co.,
Ithaca, N. Y.

Gentlemen :—

The gun which arrived Nov. 29 is more than satisfactory. I made 10 different patterns with it at 35, 40 and 63 yards, with 2 different sized loads, and to say I am pleased with the gun does not half express it. After using it more than a month I am satisfied that the model gun for hunting in this part of the country is right barrel cylinder and left full choke; and if I were going to have another new gun tomorrow it would be an ITHACA, made on the same lines as the one I now own.

Truly yours,

FRED L. SEAGER.

ITHACA GUN CO.

Send for Catalogue.
Mention RECREATION

Ithaca, N. Y.

THERE
ARE MORE

DAVENPORT

SOLD

THAN
ANY OTHER
MAKE

SINGLE
GUNS



They have merit, are well made, and shoot well.
Our single shot gun, with AUTOMATIC EJECTOR, is the
most popular gun of this kind on the market.

Send for New Catalogue of Single Guns and Rifles

The W. H. DAVENPORT FIRE ARMS CO., Norwich, Conn.

'T WAS 80 YEARS AGO.

My uncle is several years over 90, but his mind is as clear as it ever was. Were it not for his great weight I verily believe he would be off, such bright, frosty weather as we are having now, even if only after rabbits. He is a trifle hard of hearing; but one need only say "gun" or "dog" to see him start up, and bristle, and get interested.

Whenever he gets low spirited, or has a touch of the gout, and begins to think the world a delusion, I am sure to be sent for to cheer him up. I am always entertaining; not that I attempt to bore him with my own exploits with rod or rifle; but that I am a good listener.

What a remarkable fund of adventure the dear old man has at his tongue's tip. Last New Year's day he told me about one of his first excursions. He was a boy of 12 or so, and his father took him along on a hunting trip. A dozen or so men, all ardent sportsmen, made the party. They came up the river on a sloop, landed at Cornwall, and made their headquarters at what was then the only tavern. Two residents of the neighborhood joined them. One they called "Deacon" Sutherland; the other, a well known Quaker in his day, "Friend" Sands. To make the sport more interesting it was agreed that the one whose bag was biggest should be

at no further expense for the trip, as uncle put it. His shot should be paid by the others.

They reckoned by points: 5 for a wild goose; 4, a duck; 5, a gray squirrel; 3, a red, and so on. Grouse, robins and chipmunks, with a lot more small game, were lumped as one each.

One of the city men suggested that woodcock should count.

"Well," said the deacon, deliberately, "if it will please you I'm willing; let 'em go at one each, though they're a harmless bird; never touch the crops that I know of and no one eats 'em."

Never eat woodcock! Imagine that, please! One of the party ventured to say he thought they were not such bad eating; but the deacon was decided in his views; they were altogether too rank.

"Yes," put in Friend Sands, "I know they be putty rank; but I shoot 'em when I ken, and my old woman, she cooks 'em. She parboils 'em fust, and then fries 'em; and done that way they're most as good as pigeon. You see the parboilin' takes all that 'ere rank flavor out."

G. I. Cervus, Newburgh, N. Y.

The pneumatic mattress came O. K. and I am well pleased with it.

W. R. Walker, Lewistown, Mont.

"WALSRODE"



Buy Shells
loaded with
"Walsrode"
Powder

GERMANY

A. C. BAKER, N. Y.



CHARLES DALY GUNS

ARE FOR MEN THAT WANT

THE BEST.

SCHOVERLING, DALY & GALES,
302 & 304 Broadway, New York.

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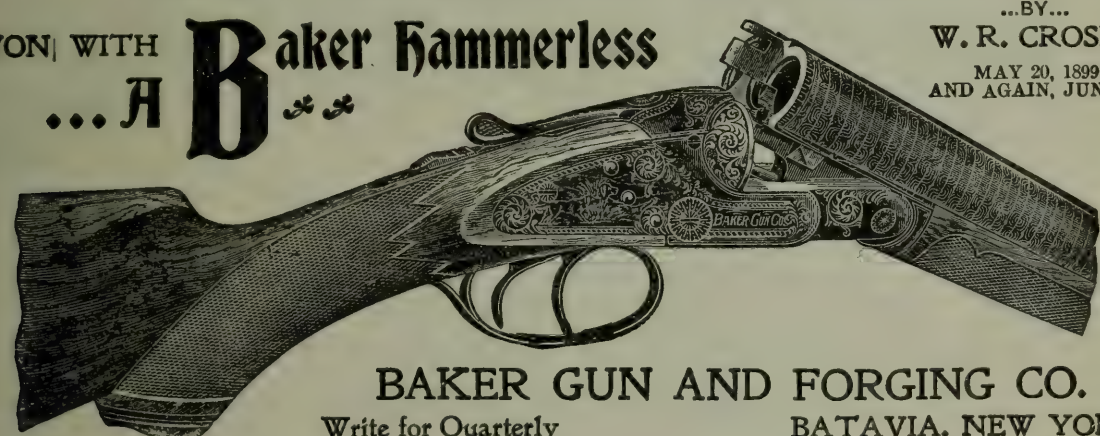
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WON WITH ... **A** Baker Hammerless

...BY...

W. R. CROSBY

MAY 20, 1899
AND AGAIN, JUNE



BAKER GUN AND FORGING CO.
Write for Quarterly BATAVIA, NEW YORK

Wing Shooting Made Easy



A new system of sighting shot-guns, so effective that the novice finds but little difficulty in killing the most rapid birds. No sportsman's outfit is complete without a

BARGER SIGHT

(Patent applied for)

It has proved itself a winner and will greatly increase the skill of *any* wing shot. Made of high grade steel, will not mar the finest barrels, can be adjusted or removed in a minute's time and will last a lifetime. Prepaid to points in the U. S. or Canada for \$1.00. Give bore, length of barrel and whether single or double. Remit by P. O. or Express money order. Circular sent on application.

GRAY & BARGER, 309 Broadway, Room 1314, New York, N. Y.

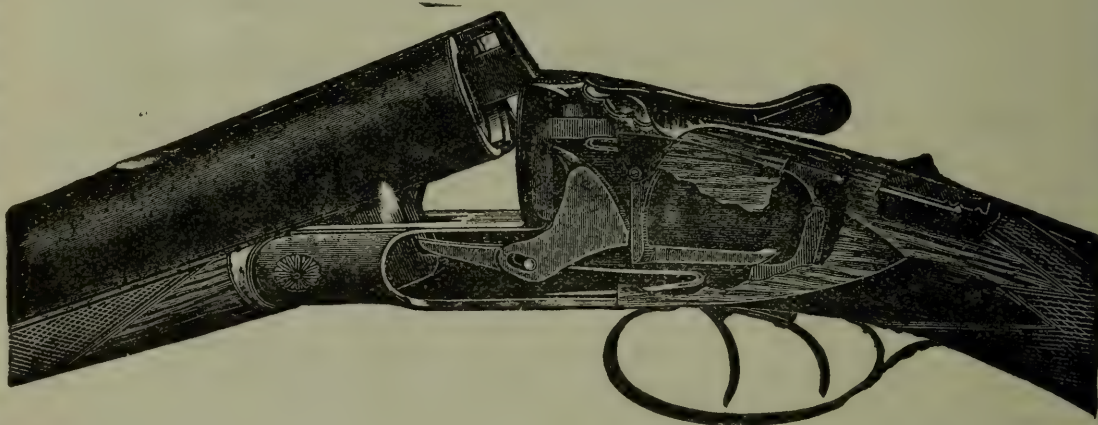
Keep Banging Away! —

If you are shooting at the traps and using the

SYRACUSE HAMMERLESS

✿ ✿ EJECTOR GUN ✿ ✿

you are dropping your birds with great regularity. Buy a Syracuse Gun (made in all grades) and keep banging away. You need never fear anything is going to give out. Just shoot, and, if your gun is pointed right, you will kill your game.



SYRACUSE GUN

Is made from the best material and by the most experienced workmen. It is not an experiment. It has gone through all that long ago. There are three good points about the Syracuse Gun: a simple lock, a strong breech, and an ejector that surpasses anything in its line. Take a chance and see for yourself. Write for catalogue.

... MAKERS ...

SYRACUSE ARMS CO.

— SYRACUSE, N. Y., U. S. A.

The Old Reliable

“Parker”



Always wins on its merits. Its record for the season of 1899, in all leading tournaments, has never been equalled for phenomenal shooting. Scores ranging from 92% to 99 1-5% made by Amateurs shooting the Parker Gun have been frequent.

Insist upon your dealer supplying a genuine Parker Bros. Gun, and don't be deceived by the statement that any other make is as good.

Send for catalogue.

PARKER BROS., Meriden, Conn.

NEW YORK SALESROOM:

96 Chambers St.

At any time in the spring the fishing at the St. Marys lakes is excellent. There are 3 varieties of trout. I charge \$1 a day for saddle horses and \$3 for camping outfit, including tents and cooking utensils. The charge for guides is \$5 a day and \$3 for cooks. Parties should furnish their own bedding and provisions. Close season in spring for all big game except bears and cougars.

Joseph Kipp, Kipp, Mont.

That extract you published from one of my letters written in Cuba is becoming a regular pest. For a month I have been getting letters from every part of the United States and Canada. They want cartridges, photos, coin, watch chains or anything else that would do for a keepsake from our gem island. It certainly speaks well for your magazine as an advertising medium.

Dr. G. L. Cable, Fostoria, Ohio.

You are not up to date unless you have seen the

Ejector and Non-
Ejector
Single or Double
Trigger

IMPROVED LEFEVER

Our catalogue describes our
New Medium-Price Hammerless



BORED FOR NITRO POWDER

LEFEVER ARMS CO., Syracuse, N. Y.

This New Trap and Field Gun meets the requirements of sportsmen who desire a first-class and reliable gun but are not prepared to buy our higher grades.

FACTS WHICH TALK

Every sportsman knows a good powder when he either shoots it himself or sees its results in the hands of others, but the average shooter probably fails to realize that during 1899

Du Pont Smokeless Won More First Averages

in tournaments of one to five days' duration than any other powder in America. Verily, a good powder speaks for itself.

E. I. DU PONT DE NEMOURS & CO., WILMINGTON, DEL.

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TRADE  **MARK.**

P **PETERS**
E **R** **E** **R** **E** **C** **T**
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No black powder behind a bullet! On account of its wonderful action in Rifles and Pistols, **King's Semi-Smokeless** has been adopted in all metallic cartridges (excepting smokeless) without advance in price.

THE PETERS CARTRIDGE CO., Cincinnati, O.

Eastern Branch: 80 Chambers Street, New York.
 A. L. Peters, Agt., St. Paul, Minn.; Hibbard, Spencer,
 Bartlett & Co., Chicago; and best trade everywhere.

I saw in RECREATION an account of a band of buffalo being on the Muddy, in Middle Park. I doubt it, for I have been over that country several times and camped on Muddy. It is a rough country, some of it fallen timber and small parks. An old-timer told me, 2 years ago; that he had heard there were buffalo in the Park, but he had never seen them. They could not live on the Muddy in winter, snow being too deep. I have walked across from the West side of the Rabbit Ear range to East side in Middle Park in ½ day. People are going through there all the while and could not help seeing 60 head of buffalo.

A. P. Waterbury, Sugar Loaf, Colo.

Last winter was unusually severe; the snow was deep and remained until spring. As a consequence, jack rabbits were considerably thinned out and cottontails almost exterminated. Coyotes are numerous and destructive. They come close to the house in the night, sometimes, indeed, stealing chickens within 40 feet of the door. A young calf was recently killed and eaten within 200 yards of the house. This has been a phenomenal season; more cloudy weather than for many years, but almost no rain. Ranchmen complain and cattle suffer.

W. H. N., Moffat, Colo.

SPORTING RIFLE SMOKELESS

Is a dense nitro powder for use in rifles built for black powder, and in all revolvers.

It gives a high velocity, flat trajectory, no smoke, light recoil and very little noise.

Shells can be reloaded the same as with black powder. They will not need to be cleaned either. Catalog?

LAFLIN & RAND POWDER CO., - - - - NEW YORK

Some people charge a fancy price for a name. Our name on a revolver or a gun is proof, wherever we are known, that the article is the best that can be produced for the money. Still we do not charge a fancy price on account of our name. We charge only for the work and material.

Forehand Guns and Revolvers

are

**DURABLE
SERVICEABLE
RELIABLE**

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The Price is always Right

Made by Forehand Arms Co., Worcester, Mass.

Write for Illustrated Catalogue.

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"THE LAND OF THE SUNSET"

An Ideal All-the-Year Climate

THROUGH DAILY SERVICE

With Pullman Buffet and Ordinary Sleeping Cars

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THE BIG GAME OF NORTH AMERICA.

Its Habits, Habitat, Haunts, and Characteristics. How, When, and Where to Hunt it.

8vo, 600 Pages, 80 Illustrations. Cloth, \$3.50; Half Morocco, \$5.00; Full Morocco, \$6.50.

CRUISINGS IN THE CASCADES.

A Narrative of Travel, Exploration, Amateur Photography, Hunting and Fishing, with Special Chapters on Hunting the Grizzly Bear, the Buffalo, Elk, Antelope, Rocky Mountain Goat, and Deer; also on Troutng in the Rocky Mountains; on a Montana Roundup; Life Among the Cowboys, etc.

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AMERICAN GAME FISHES.

How, When and Where to Angle for Them.

8vo, 400 Pages, 50 Illustrations. Cloth, \$2.50; Half Morocco, \$4.

HUNTING IN THE GREAT WEST.

(RUSTLINGS IN THE ROCKIES.)

Hunting and Fishing Sketches by Mountain and Stream.

**12mo, Cloth. Over 300 Pages, Illustrated.
Cloth, 75 cents; Paper, 25 cents.**

THE AMERICAN BOOK OF THE DOG.

The Origin, Development, Special Characteristics, Utility, Breeding, Training, Diseases, and Kennel Management of all Breeds of Dogs.

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CAMPING AND CAMP OUTFITS.

A MANUAL OF INSTRUCTION FOR YOUNG AND OLD SPORTSMEN.

12mo, 200 Pages, 30 Illustrations. Cloth, \$1.25.

THE BATTLE OF THE BIG HOLE.

History of General Gibbon's Engagement with the Nez Perce Indians in the Big Hole Basin, Montana, August 9, 1877.

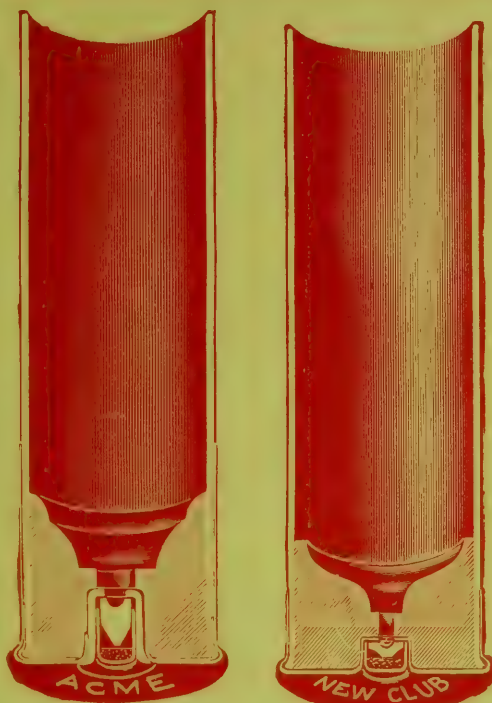
12mo, 150 Pages, Profusely Illustrated. Cloth, \$1.

These books will be mailed, post-paid, on receipt of price, by the author,

G. O. SHIELDS, 23 W. 24th St., New York.

Sportsmen

who load their own shells often find themselves in a locality where the use of several different charges is almost a necessity if they would bring down their full quota of game; and in such cases it is quite ordinary sportsman's luck to be provided with shells which are only adapted to one kind of powder.



U. M. C. Empty Shells

are adapted to the use of every grade of powder. The closest possible attention is given to every detail in their manufacture—especially to the Primers, which will be found absolutely reliable, and to the construction of Bases which insure the full carrying power of the charge for which each is particularly designed.

WRITE FOR PRICE LISTS AND DESCRIPTIVE MATTER.

Union Metallic Cartridge Co.

Winner of Handicap 1893-94-95-97-98-99

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BRIDGEPORT, CONN.

The THREE requisites of a perfect gun

QUALITY

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can only be obtained after years of experiments

The Remington Hammerless



is backed by nearly a century's experience, and the success of the man who shoots a Remington proves that our efforts have not been in vain. Send for catalogue

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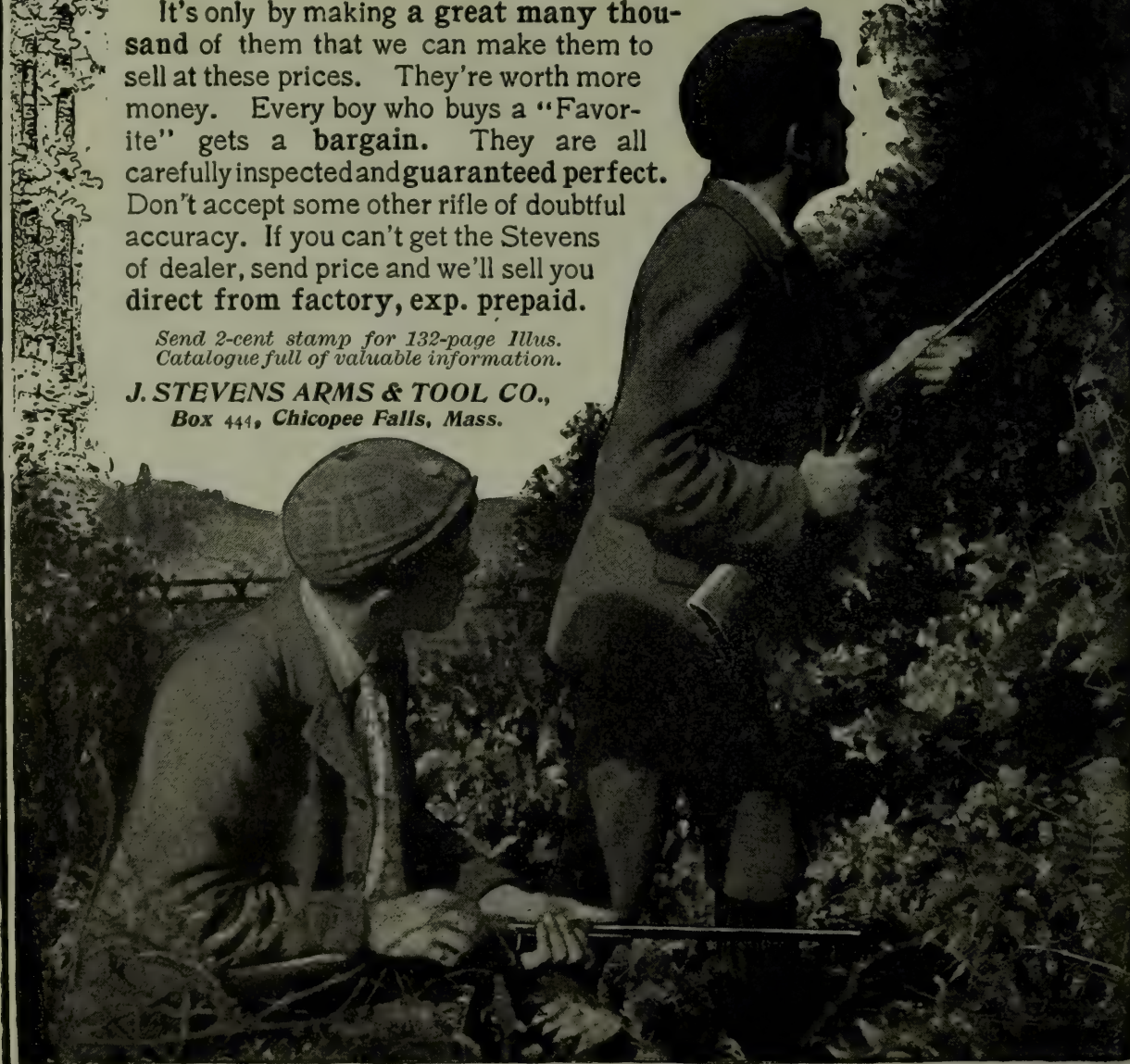
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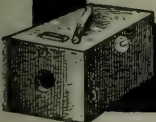
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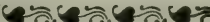
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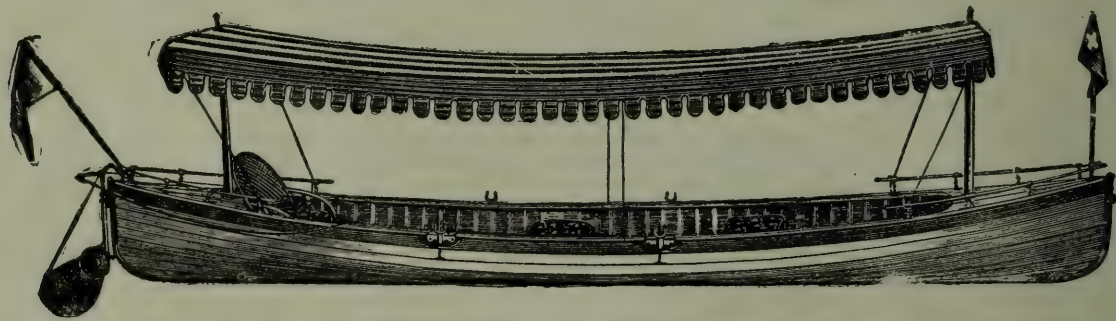
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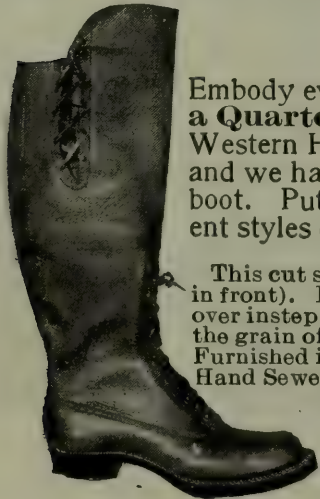
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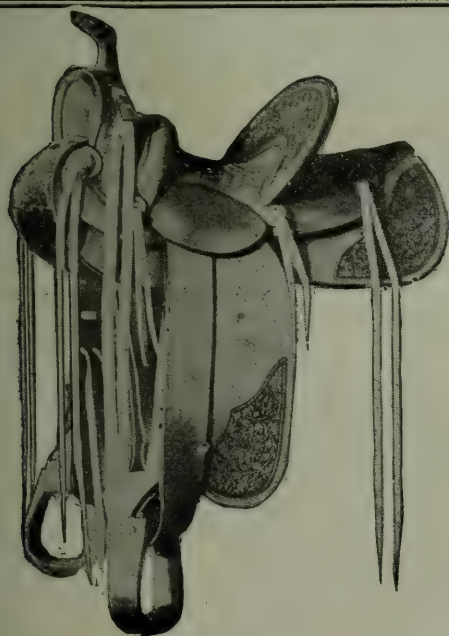
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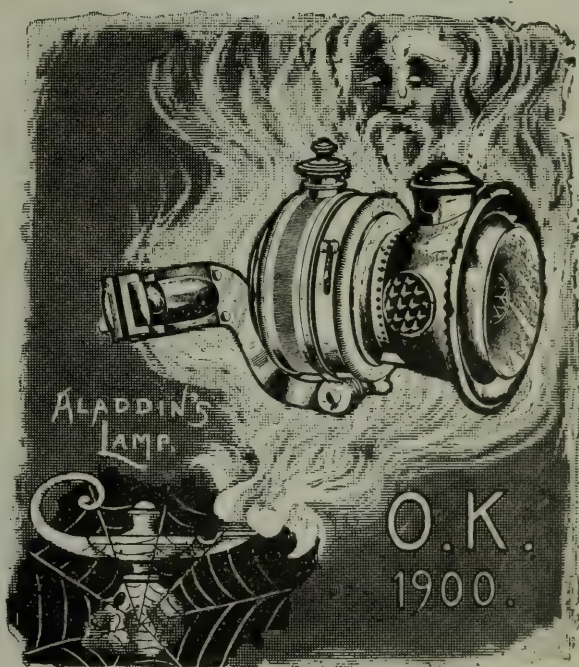
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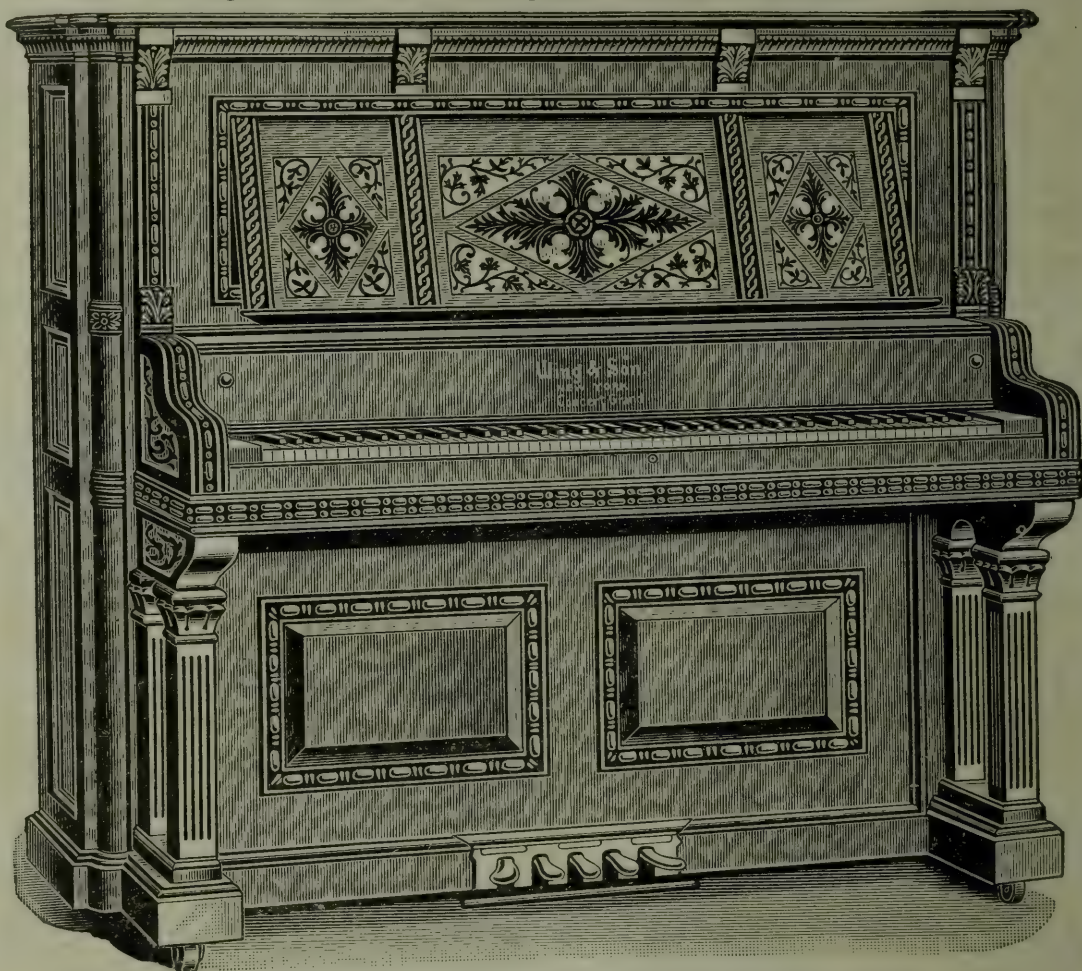
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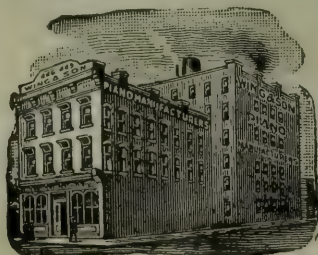
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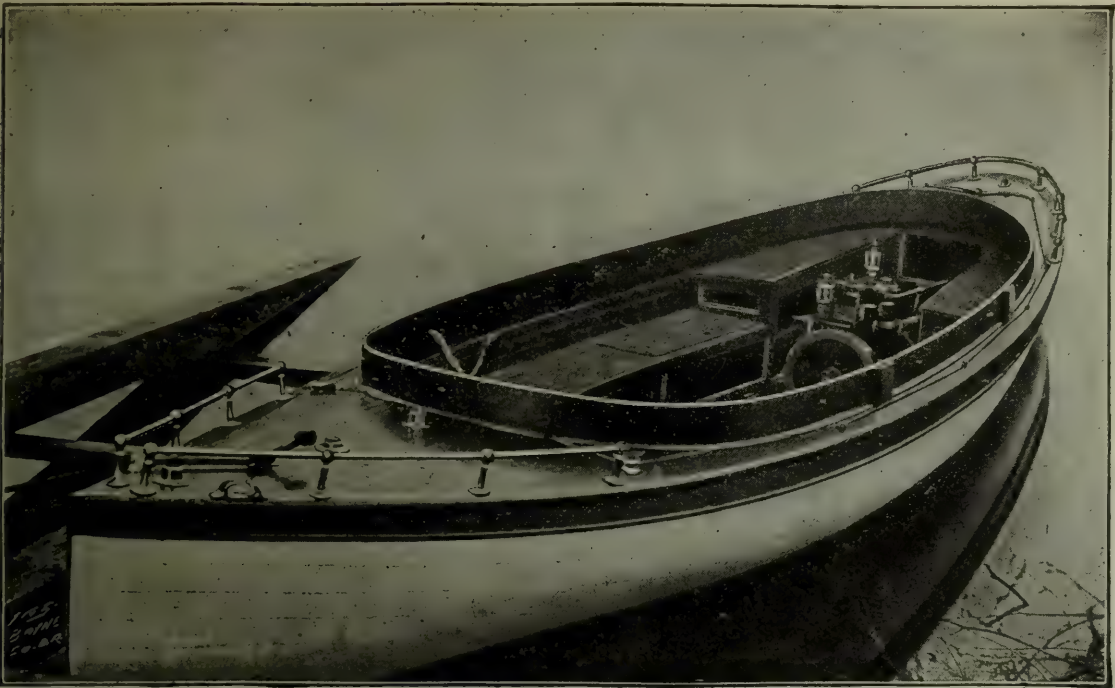


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Then we keep them in refrigerating rooms until they are used. We preserve their aroma, so that they come to our vats with all the freshness and virtue that they had on the vines.

That's one reason why Schlitz beer is so palatable. Every material used in it is the best that money can buy. But without purity that expense would be folly. No beer can be good unless it is pure. To insure absolute purity, we largely increase the necessary cost of our brewing.

Your physician knows. Ask him which beer is best for you.





RECREATION

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G. O. SHIELDS (COQUINA), Editor and Manager.

AN ALASKAN MOOSE HUNT.

JOHN C. CAMPBELL.

In the June number of RECREATION I saw an article headed "General Advice," written for the benefit of A. E. Snyder, in re big bore guns for shooting big game in South Africa, and I can not agree with what ".40-82" says about it. I was there several years and did considerable hunting. I came in contact with many hunters of big game, notably H. C. Selous, who always uses a .450 rifle, solid cylindrical bullet, for lions, elephants, rhinoceroses, hippopotami; and for antelope, or, as they are called there, bok (buck), the same bore rifle, shooting a rather lighter charge of powder and hollow pointed conical bullet. Some of the buck there are fully as large as either our moose or elk, if not larger, the smallest size weighing about 350 pounds. I have often carried the smaller size slung on the end of my .40-82 Winchester.

I also read with interest an article entitled "A Cute Bear." It reminded me of a similar instance I saw in the case of a fox, while wintering on one of the lakes at the head waters of the Yukon. I spent part of my time trapping, being an old trapper and hunter. Have had much experience trapping foxes, wolves, etc., and thought I knew all about it till I tried to trap foxes in Alaska. They were plentiful around my camp, so I determined to have some of their skins. I built small enclosures of logs to put the bait in, setting the trap after disin-

fecting it in the usual way, and using mitts while setting it. I used part of the leg of a horse for bait. The first time the fox came along he quietly lifted the trap, put it one side, without even springing it, and carried off my bait. Thinking I would make sure of him the next time, I tied a piece of poisoned meat to another piece of the horse leg, and tied the bait to the back of the enclosure. On going my rounds next morning I found my bait gone and the trap removed as usual, unsprung. I took up the trail, which was a difficult matter on account of tracks being so numerous and the fox being accompanied by another one. He made directly across the lake, carrying the bait in his mouth, never letting it drag in the snow until he got about halfway across, when he began to show signs of the poison working on him. His mate left him about that time and took a different route. The fox which had taken the poisoned bait began to zigzag, to find a suitable place for hiding his prize. Finding one to his satisfaction he covered the meat with snow and continued his course across the lake, which at that point is over 3 miles wide. On my arrival at the other shore I found him stretched out and not quite cold. He proved to be a fine cross fox, and I sold his skin to a returning Klondiker for \$6. The fox had a splendid tail, and one of the dog drivers connected with the N. W. M.

P., at La Barge, offered me \$6 for the tail alone. I have seen many cunning foxes, but that one beat them all.

I like RECREATION better than any other sportsmen's journal I know. No one can get big game in the N. W. T. unless he has plenty of time and money. Packers must be hired to pack the camping outfit, provisions, etc., into the interior, where both moose and caribou are fairly plentiful. Grouse are not numerous, as there is no close season.

I saw a novel moose hunt about a year ago as I was ascending the Yukon with some other prospectors. We were nearing an Indian camp and saw something unusual was occurring. An old Indian was hurriedly embarking in his birch canoe, with rifle and hunting knife, and 2 younger Indians were making the best of their way up the beach, armed with .45-70 Winchester. The old man steered across the river to intercept the moose, and drive it to the shore, where the camp was situated. In the meanwhile the 2

younger men, having reached a point above where the moose was swimming the river, commenced to shoot at long range, to prevent its going above them. When they had it fairly turned in the direction of the older man they embarked in a poling boat and gave chase, keeping well behind, while the old fellow drove it toward shore where the camp was and a small island made a shallow channel. As the moose neared the island the Indians drew nearer. When the moose's feet touched bottom it made frantic efforts to reach a place of safety, but the Indians opened a deadly fire on it at close quarters, and after firing about a dozen shots succeeded in bringing it down. Only 3 of the shots struck it. One broke its backbone. We watched the Indians skin and cut up the carcass, which they did with a hunting knife, in a remarkably short time. We tried to buy some of the meat, but as they only asked \$1.50 a pound we declined their offer.



STARTING ON A MOOSE HUNT.

AMATEUR PHOTO BY A. N. CLEMMER.

Winner of 43d prize in RECREATION'S 4th Annual Photo Competition. Taken with Eastman No. 4 Cartridge Kodak

DUCKING ON THE SUSQUEHANNA.

F. ZIMMERMAN.

k shooting on the Susquehanna, ally on the main stream, is different any other method of which I have heard. From where its 2 branches join, the river for 50 miles Southward averages a mile wide. It is dotted with thousands of small bars and islands, where the birds feed. The ducks, which consist of nearly every variety, but chiefly black and mallard, are found only near certain bars. Other bars look equally inviting, yet the ducks avoid them, and gather in unexpected places, selecting those which afford a chance of escape in case of danger.

Decoy shooting is little followed along that section of the river; the birds are too wary. The most approved method is shooting from duck boats or sinks. A flat boat about 14 feet long, with a blind on one end built of grass, is generally used. The boat is usually occupied by 2 persons, one to paddle and one to shoot. The paddling requires by far the most experience and skill. With an outfit of this description, a good paddler and a fair shot, a satisfactory bag can be obtained almost any day during the flight, by floating down with the current 30 or 40 miles.

One day in the latter part of November I received a letter from Joe, who lives down the river about 9 miles, asking me to go out for black ducks, as they were moving. I got down my gun, which had seen 4 years' service among the ducks, prepared ammunition, and left for Joe's.

Next morning we loaded the boat with our guns, paddles and lunch, and a large bunch of straw, with which to cushion the bottom of the boat. We were well acquainted with every bar, riffle and channel. After a paddle of about a mile we arrived at Bald flat, where we expected to get our first shot. I took the paddle for the day, as I pride myself on my skill, and wary must be the old green-headed drake Joe and I cannot fool. Silently we glided past the eddies. We had nearly passed the bar when "Splash! whirr!" Away back to the right a pair of black ducks jumped out, offering a difficult shot.

"Bang!" dead bird.

"Bang!" clean miss.

The first duck of the season. We were both jubilant. After securing the dead bird we floated along, now and then picking up a small duck on the open water, and once in a while seeing a bunch of whistlers ahead. We ran into a favorite bar 8 miles below our starting point, where we expected to do our best shooting.

"Get down now and do not wink."

Silently we glided among the birches. I whispered:

"There are the greenheads, Joe, in among the birches."

"I don't see them."

"Burr!" Up they rose, about 30, all mallards.

"Bang, bang!" Both shots nearly together and never a bird. I singled out the old leader, off to the left.

"Bang!" A long shot and a fine bird; the biggest mallard I ever killed, weighing 4 pounds, 2 ounces.

We then had a hot argument as to the whys and wherefores of Joe's miss. I thought and still believe he was rattled and shot to kill the whole flock. We glided along until we arrived at Berry's falls, 18 miles below. Then Joe said:

"Hold up! There go 4 ducks in behind that bar below the falls."

After a consultation we decided Joe should crawl across the bar among the bushes, while I was to float down to the point and wait for him. I floated leisurely along, expecting to hear the crack of Joe's gun. When I reached the last of the willows and looked across the grass that skirted all the bars, I saw the green head of a mallard drake. I picked up the gun with one hand, while with the other I held to the willows. Then I fired, and out went 2 more.

"Bang!" dead bird.

"Bang!" miss.

I will try once more.

"Bang!" The duck's foot hung down for a moment, but he flew on strong as ever. I hurried to pick up the 2 dead birds, when out of the bushes came Joe.

"Hurry! One lit on the other side."

He jumped in and away we went for the other one which we thought wounded, but found dead on the water 300 yards across and below the bar.

"Joe, why didn't you shoot?"

"Why, I was just going to when you shot. I was lying down flat and pulling up my gun to fire, but thought you were shooting at the ducks I was after and I expected to see them drop."

Three more miles of paddling took us to Halifax, where we pulled in, sent our boat home by freight, and took the evening train to our respective towns. We had 3 black ducks, 4 mallards and enough small ducks to make the score 17.

Fall shooting on our river is becoming poorer every year, partly because of the incessant shooting at quail and rabbits on both shores. This has driven the ducks away from places where they were formerly plentiful. Then the coal culm washing down the river destroys the feed and makes the water rank, spoiling both duck shooting and fishing.



"LAWS! THERE AIN'T NO SPORT LIKE FISHIN'."

FISHIN'

WILLIAM A. THOMSON.

Settin' 'long th' crick afishin',
 Waitin' fer a bite,
 Where th' water's cool an' swishin',
 Settin' there from morn till night.
 Laws! I wisht wuz allers summer,
 Didn't hev t' go t' school;
 Why I'd jest set'n keep on fishin'—
 Sakes alive! jest see that pull.
 Got 'im? Bet yer life I got 'im,
 Take me fer a gol dern fool!

See them cranes away up yonder
 Sailin' thro' th' sky;
 Laws! I wisht I hed my gun er
 Sumthin'. Make the feathers fly?
 Well, I guess. Y'orter see me
 Bringin' down that chicken hawk
 What stole our Mandy's yellor hen
 An' 'en y'd hev no room t' talk.
 (Ef I don't git er bite right soon
 Guess I'll hev t' take a walk.)

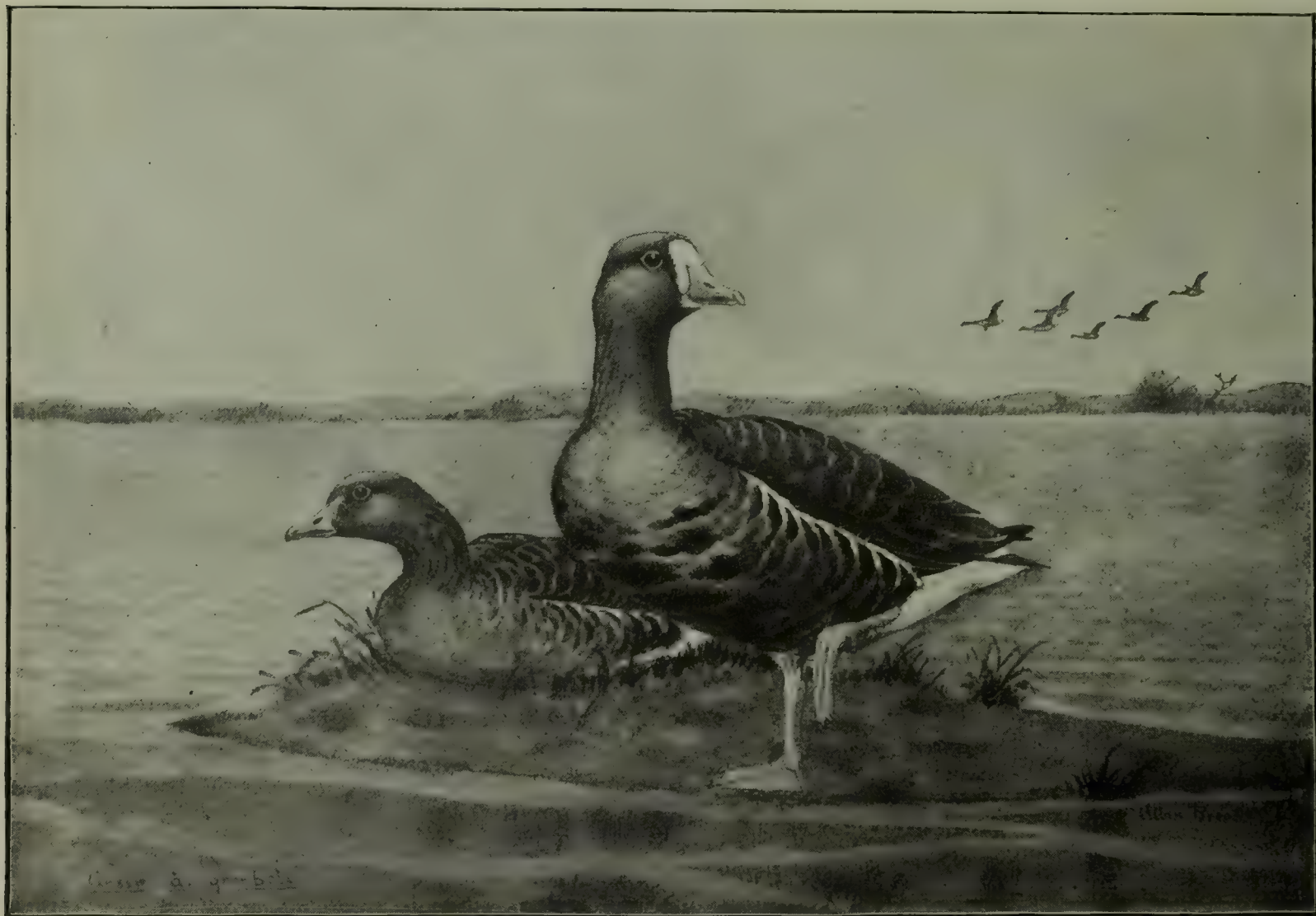
Settin' 'long th' crick afishin',
 Waitin' fer a bite;
 Laws! there ain't no sport like fishin',
 Fishin's bully—git that right!
 In the mornin' when th' birds
 Is singin' an' th' air is cool,
 In the evenin' when th' frogs
 Is hollerin' in ev'ry pool—
 Show a feller don't like fishin'
 And I'll show a gol dern fool.

AMERICAN WHITE-FRONTED GOOSE. *ANSER ALBIFRONS* *GAMBELI.*

ALLAN BROOKS.

The white front is also known to shooters by the names "speckle-belly," and "laughing goose," and throughout the Mississippi valley is erroneously called "brant." It is found from the Atlantic to the Pacific, but seldom in any large numbers, except, perhaps, at its breeding grounds in the far North. I have seen it in Southern British Columbia as late as June, but have never found its breeding ground, and do not think it breeds in the province at all, though the young are said to have been taken on Caribou lake, Vancouver's island.

following incident. I had pitched my decoys and shot several geese within 100 yards of a pair of white fronts which were feeding out of sight in a small pool to my left. In about $\frac{1}{2}$ an hour I saw 2 sportsmen coming toward me over the mud flats. When within 200 or 300 yards they stopped and seemed to consult. Then one of them fired 2 shots with a rifle, as I supposed at my decoys. I got up in my pit and shouted to them to stop. They then came up within 60 yards of the white fronts and missed them with a shot gun, when the geese rose



AMERICAN WHITE-FRONTED GOOSE. *ANSER ALBIFRONS GAMBELI.*

The white front is the least wary of all geese, and, as Charles St. John observed of its European representative, the typical *albifrons*, it seems to prefer swampy ground to grain fields or mud flats. I have often seen it in localities where one would never expect to see a goose.

I have never seen a large flock of this species, generally 2 or 3 dozen, but often singly. It associates freely with all other geese, but can always be picked out by its lighter color and entirely different cry, which resembles that of a domestic goose.

To illustrate its tameness I will relate the

and flew off to the lake. Toward evening they came in again and I killed them right and left. They are a small goose weighing about 5 or 6 pounds on an average.

Young birds lack the conspicuous white forehead and black patches on the lower surface, but can always be told from all other geese by their yellow feet. The bill in the adult is flesh colored, with the culmen dull orange yellow; feet orange, iris hazel.

In the old world there are 2 close allies of this bird, *Anser albifrons* and *Anser erythropus*.

SECOND ANNUAL MEETING—REPORT OF THE PRESIDENT.

To the Officers and Members of the
League of American Sportsmen:

Gentlemen—A year ago to-day I had the honor of reporting to you a total membership of 1,376 distributed throughout 36 States. The membership has now grown to 2,327, and to-day reaches into every



DR. C. H. MERRIAM,
1st Vice-President.

State and Territory in the Union; and we have 33 members in Canada. We have 10 life members, each of whom has paid into the League treasury \$25, and 4 members have paid their dues 10 years in advance.

A year ago I reported to you that we had organized 11 State divisions. I now have pleasure in informing you that we have since organized 8 more, making a total of 19 now in working order.

The New York division is still at the head of the list as to numerical strength. A year ago it had 377 members, and Chief Warden Pond had, up to that time, appointed 28 local wardens in as many counties. To-day the New York division has 700 members and 36 local wardens. Several of the other States have over 100 members each.

This growth is encouraging, yet it is not at all what it should have been and what it would be if sportsmen in general realized the great need that exists of drastic measures for the protection of our game, our game fishes and our song, insectivorous and other birds. I am astounded when I realize how many sportsmen there are in the United States who are willing to spend hundreds and some of them thousands of dollars each year in their efforts to kill game, and who are not willing to spend one dollar a year to preserve the game or to increase the supply of it. I am astonished when I think of the large number of ornithologists in the country who are constantly writing prosy descriptions of birds, their nests and their eggs, which few people ever read, and who never say a word or spend a dollar to save these birds from destruction.

On the other hand, it is especially gratifying to note that many of the most prominent sportsmen and naturalists in the

United States have shown their approval of this League by becoming members of it. Among these may be mentioned the Hon. Theodore Roosevelt, Hon. Jos. F. Johnston, Governor of Alabama; Hon. Jos. E. Thropp, M. C. from Pennsylvania; Hon. W. D. Jenkins, Secretary of the State of Washington; Hon. M. Pat-
rie, Secretary of the State of Idaho; Dr. Seward Webb, Mr. Geo. L. Carnegie, Hon. Warner Miller, Hon. John S. Wise, Hon. Bird S. Coler, Wm. Brookfield, Dr. David Starr Jordan, President Stanford University; Dr. D. C. Gilman, President Johns Hopkins University; Hon. John F. Lacy, M. C. from Iowa; Hon. B. F. Caldwell, M. C. from Illinois, and W. B. Clark, State Geologist, Johns Hopkins University.

Many members seem not to be aware that we have in our constitution a provision for the formation of local chapters of the League. Only 4 of these have thus far been organized. One of these is at Kalispell, Mont.; one at The Dalles, Oregon; one at Schenectady, and one at Penn Yan, N. Y. All are doing noble work.

Kalispell chapter has secured 4 convictions for violations of the game laws, and has scared every would-be law breaker in that county, red and white, to such an extent that the game and fish laws are now rarely transgressed. The Schenectady chapter has planted several thousand fish fry in the streams thereabout, has imported a large number of quail, which have been turned out, and is planning to buy and liberate a lot of English and Mongolian pheasants. This chapter, as well as the one at Penn Yan, has put up our muslin posters throughout the adjacent country, warning all persons to observe the game and fish laws, and offering a reward for each conviction for a violation thereof. The



WM. T. HORNADAY,
4th Vice-President.

amount of local discussion and interest that grows out of the formation of a local chapter of this League is beyond computation. It can readily be understood that no one is likely to break a game or a fish law when it is known that 25 or 50 League members are distributed throughout the

region, all of whom are watching for just such cases.

We have made fair progress in the matter of enforcing the game and fish laws in the various States. We have prosecuted 62 men for violating these laws, and have secured convictions in all cases. A reward of \$10 has been paid to the local warden who made the arrest in each case. But few of these payments appear in the report of the treasurer, because they have been paid by private individuals—several of them by Chief Warden Pond out of his own personal funds.



H. S. FAY,
Chief Warden Mass. Div.

One important prosecution under the auspices of the League was that of William Jackson, of Piney, Wyo., who was arrested by Local Warden W. C. Pile for selling elk skins. Thirty-five of these were found in his possession. He was arraigned before Justice Wallace, who fined him \$50 and costs, the total amounting to \$78.50.

Local Warden Thos. Harris, of Port Jervis, N. Y., has patrolled his territory diligently for a year past. Within a few days after his appointment the fact became so well known throughout the country that he has been unable to detect any man in the act of breaking the law. He did, however, capture 3 dogs that were running deer. He reported the case at once to Chief Warden Pond, and asked for instructions. Mr. Pond wrote him to kill the dogs. This Mr. Harris did, and though technically he had not earned a reward, as provided for in the constitution, Mr. Pond paid him \$10 for this service.

Local Warden H. E. Braman, of Keene Valley, N. Y., has made a most excellent record as an officer of the League. Here is an extract from his latest report:

Since Oct. 20 last I have successfully prosecuted the following named men:

Pell Jones, pursuing deer with dogs; pleaded guilty; fined \$108.50.

Barney Field, killing deer out of season; sentence suspended.

Fred Smith, having venison in possession out of season; pleaded guilty; fined \$15.

Leonard Phinney, pursuing deer with dogs; pleaded guilty; fined \$113.85.

Joseph Hanmer, pursuing deer with dogs; pleaded guilty; fined \$50.

John Howe, pursuing deer with dogs; pleaded guilty; fined \$111.90.

R. H. Hulet, pursuing deer with dogs; settled out of court; fined \$50.

Wm. Fleming, pursuing deer with dogs; settled out of court; fined \$50.

Ed. Dalton, pursuing deer with dogs; settled out of court; fined \$50.

There are a lot more cases pending, some of which we expect to close up within a week.

Meantime, Mr. Braman's store at Keene Valley has been burned, presumably by one of these outlaws.

Mr. A. W. Van Saun, Chief Warden of the New Jersey division, has handed me a report of his work during the past year, from which I quote:

"Following is a list of the arrests and convictions by the New Jersey Wardens:

"April 17—John Garder, Union county; taking pickerel; \$10 and costs.

"April 18—David Earl; killing dove; sentence suspended.

"May 14—Ernest Linder; Sunday hunting with hounds; \$20 and costs.

"June 8—Will Garrison, Passaic county; set lines; 7 days in jail.

"June 8—Tom Garrison, Passaic county; set lines; discontinued.

"June 10—Lombardo, Passaic county; killing swallows; \$60 and costs.

"June 24—Joe Garrison, Passaic county; set lines; 30 days in jail.

"July 1—Simon Ader, Morris county; set lines; 15 days in jail.

"July 2—James Bean, Morris county; spearing trout; \$25 and costs.

"July 3—Alvah Fisher, Morris county; spearing trout; \$25 and costs.

"August 30—James Moore, Union county; insectivorous birds; \$20 and costs.

"October 16—Frank Schultz, Union county; insectivorous birds; \$40 and costs.

"October 16—James Weston, Union county; insectivorous birds; sentence suspended.

"October 22—James Andrea, Middlesex county; Sunday gunning; \$20 and costs.

"October 22—Jos. Andrea, Middlesex county; insectivorous birds; \$20 and costs.

"October 23—Antino Mario, Union county; brown thrush; \$20 and costs.



ANDREW WHITEHEAD,
Chief Warden Colo. Div.

"October 23—Gabriel Mario, Union county; brown thrush; \$20 and costs.

"October 23—Anthony Tromontana, Union county; brown thrush; \$20 and costs.

"December 10—Hubert Borzner, Middlesex county; Sunday hunting; 20 days in jail.



C. F. EMERSON,
Chief Warden Pa. Div.

"December 10—Chas. Myers, Middlesex county; Sunday hunting; 20 days in jail.

"These arrests were all made by Local Warden C. M. Hawkins, of Roselle, who is also a State Warden. In December, '99, I personally appeared before Justice J. R. Evans, of this place (Pompton Plains), and swore out complaint against Louis Van Loon for

Sunday hunting. He was arrested by Warden Kern, of Hudson county, and fined \$20."

Under date of July 7, 1899, Mr. R. A. Osborne, a League member at Rea, Fremont county, Idaho, wrote me that 2 men were endeavoring to secure a lease of certain State lands, bordering on Henry's lake, in order that they might engage in netting trout in the lake and shipping them to market. I took this matter up with the Secretary of State, at Boise, and checkmated these men. In due course I received a letter from the Governor stating that he had instructed the Surveyor-General of the State to locate all lands adjoining Henry's lake, in the name of the State, so that no one can occupy them without a permit from the State. The Governor assured me that during his incumbency no permit would be given any one to take trout from Henry's lake, or from any other water in the State for commercial purposes.

In April last the California State Fish Commission issued an order providing for the destruction of 40,000 to 60,000 seals and sea lions, which inhabit the California coast in the neighborhood of San Francisco, because the fishermen claimed that these animals were killing some of the food fishes. The State Fish Commission employed a number of professional hunters and sent them to the rocks with instructions to kill all the seals and sea lions they could find.

I immediately appealed to the Secretary of the Treasury, in the name of the L. A. S., to stop this killing, and we

brought so great an influence to bear on him that he issued an order, through the Superintendent of the Lighthouse Board, to stop all killing of seals on the lighthouse reservations. This practically includes all the rocks and islands about the Golden Gate which constitute the home of these animals. Thus the League has been instrumental in saving the many thousands of these beautiful and interesting creatures which have been a source of pleasure and instruction to sight-seers for 50 years.

On January 15th last Mr. C. H. Stonebridge reported to me that August Shultz, a restaurant keeper at 1467 Broadway, had the carcass of a deer hanging in front of his place of business. I at once informed Attorney Seymour and Chief Warden Pond of the fact, and we 3 called on Mr. Shultz, seized the deer and sent it to the Hahnemann Hospital.

We told Mr. Shultz we should then take him into court, but he pleaded ignorance of the law and showed us a letter from August Silz, a wholesale game dealer at 85 Barclay street, stating that inasmuch as this was a foreign deer, it could be exhibited and sold without violating the New York law. In view of this fact, we decided not to prosecute Mr. Shultz. He, however, signed a plea of guilty of a violation of law.

We next called on Mr. Silz, and found 10 European deer and 29 Egyptian quails exhibited in front of his place of business. He claimed the right to expose and sell these because they had been imported. We went into court, entered a complaint against Mr. Silz, and the court summoned him to appear and plead. At the preliminary hearing Mr. Silz and his attorney claimed the New York law did not apply to foreign game. The court decided it did, and Mr. Silz was held for trial.

District Attorney Gardiner took charge of the case, and the League employed as special counsel to assist Mr. Seymour the Hon. John S. Wise. The case was tried in the Criminal Court February 15th, and was stubbornly contested on both sides. The court found Mr. Silz guilty, and he was fined \$50. A civil action was at once begun against him under



PROF. M. J. ELROD,
Chief Warden Mont. Div.

the statute, which provides a penalty of \$100 for each deer, or part thereof, had in possession.

In May last the Duluth Medical Society held its annual banquet at the Spaulding House at Duluth, Minn., and during the dinner a course of quail was served. This was in close season, and Dr. J. D. Tit-



L. H. REUTINGER,
Chief Warden Ohio Div.

comb, of Duluth, a member of the L. A. S., protested, in the name of the League, against this violation of law. He wrote me the facts, and I took up the matter with the manager of the hotel and with Chief Warden Smart, of the Minnesota division. The manager of the hotel assured me that the law was broken without his knowledge or intent, and that if allowed to

escape in this instance he would see that the laws were strictly observed by his employees in future.

It affords me great pleasure to mention Sidney M. Logan, John Eakright, W. F. Mulaney, and Geo. H. Farmer, of Kalispell, Mont.; Eben P. Dorr, of Buffalo, N. Y.; Dr. J. C. Ross, of Canaan, Conn., and W. P. Beach, of New Haven, Conn., as among other local wardens and members who have rendered efficient and valuable aid in our work.

A great deal of good has also been done by personal correspondence with persons accused of law breaking. Hundreds of cases have been reported to me by mail, and I have in every instance written the accused, stating the nature of the complaint made against him, and asking him for a pledge that he would obey the laws in future. I have advised all such persons that unless they made such written promises they would be prosecuted, and that in any event our officers or members would keep watch of them. In nearly every case a prompt reply has been received, promising faithful obedience to the laws. A number of these reports have been published in the official organ, and it is impossible to calculate the amount of good thus done. We can readily understand that in every such instance the news had been widely circulated that a certain man had been reported to the League for breaking the laws, and that the League was following up the case. This has had the effect of putting other would-be law breakers on their guard, and it is safe to say

that thousands of birds and mammals have been thus saved from destruction.

Here are a few cases in point. On March 16, 1899, I was informed that certain employees of the D. & H. Railway Co., in the Adirondacks, were buying ruffed grouse and sending them by trainmen to Albany, and thence to New York, in violation of law. I reported this case to Mr. J. W. Burdick, G. P. A. of that road, who is a member of the League, and who at once made a searching investigation. He was unable to detect any one of his employees in violating the law, as charged; but he reported to me that he had all his employees under surveillance; that he had cautioned them, and that in any case where guilt could in future be proved the offender would be promptly dismissed from the service.

In January of this year I was advised that an employee of the Great Northern Express Co., at Butte, Mont., was buying and selling trout in close season. The complainant sent me a copy of a telegram he had received from this man. I promptly transmitted this to the general manager of the company, who investigated the case, found the man guilty and disciplined him. In a letter written a few days later, the manager assured me this man would never offend again and that all his employees had been cautioned against violating the fish or game laws in any way.

Another means by which a great deal of good has been done is in the publication of reports in the daily press throughout the country of the work of the League in various localities. Chief Warden Elrod, of the Montana division, and Chief Warden Stearns, of the Virginia division, have done a vast amount of good in this way. They have written column after column of interesting and effective matter, which has been sent to and published in all the important daily and weekly papers of their States. The result is that the League is known and talked of by a larger percentage of the people of Montana and Virginia than of any other States in the Union. There is scarcely a man or woman in either State, whether interested in field sports or not, who does not know and talk about this organization.

This is one of the most fertile fields for



FRANKLIN STEARNS,
Chief Warden Va. Div.

work that exists to-day. All live newspaper editors would gladly give space to good articles on the subject of game protection, and if all members would load up their newspaper offices with newsy material, as Professor Elrod and Mr. Stearns have done, the membership of the League

would grow rapidly and its usefulness would increase accordingly.



J. S. STANGROOM,
Chief Warden Wash. Div.

Mr. Stearns called a mass meeting at the Chamber of Commerce in Richmond for the night of January 24, which I had the pleasure of attending. A large number of the prominent and influential sportsmen of that State were present, and a committee was appointed to draft a new game law to be presented to the Legislature. The committee was instructed

to provide in this bill some radical reforms in the way of shortening the seasons for killing and selling game, and it is well nigh certain the bill will be passed.

Still another way in which the members of the League could do great service for it is by personal solicitation among their friends. Almost any live sportsman or naturalist would pay a dollar for membership in this League if the matter were placed before him by some friend, in a forcible manner. As a further evidence of this I may mention that Dr. H. R. Bishop, ex-Chief Warden of the Massachusetts division, has personally sent in 76 applications for membership. Mr. J. S. Stangroom, Chief Warden of the Washington division, has sent in 51; Mr. R. B. Lawton, Chief Warden of the Connecticut division, Mr. M. D. Hart and Mr. C. B. Cushing, 40 each; Mr. W. T. Hornaday, 35; Mr. J. A. Loring, Mr. A. F. Rice, Mr. Franklin Stearns, Mr. J. W. Furnside, 28 each; Mr. H. C. Went, Mr. W. E. Beach, Mr. L. H. Reutinger, 20 each; Mr. Mark Wedge, Hon. L. A. Huffman and Dr. Dunham, 15 each. It is safe to say there is not a member of this League anywhere who could not turn in 25 applications for membership in one day if he would work as these men have worked. Yet there are scarcely 50 men among our 2,300 members who ever sent in a single application other than their own.

Congressman John F. Lacey, of Iowa, a member of this League, has introduced in Congress a bill which authorizes the

agricultural department to engage in the propagation, distribution and preservation of game birds and other birds useful to man. This bill also authorizes the interstate commerce commission to prohibit the shipment from one State to another of game killed in violation of law, or the shipment of game killed at any time in any State having a law prohibiting the exportation of game. Mr. Lacey's bill is known as House bill 6,634.

Your President recently visited Washington and held an interesting conference with Mr. Lacey. This gentleman earnestly requests the aid of the L. A. S. in securing the passage of his bill. All members of the League are therefore urged to write personal letters to their Senators and Representatives in Congress, urging and demanding the passage of Mr. Lacey's bill. Not only this, but each member of the League should induce as many as possible of his friends to write similar letters, whether they be sportsmen or not. There are few men or women in the United States who, if their attention were called to the necessity and the desirability of preserving the game, the song, insectivorous and plumage birds in this country, would not do this much to aid in such a cause. Mr. Lacey says he realizes that the only hope of securing the passage of his bill is in having great numbers of such letters written to Congressmen and Senators by their constituents. There are few members of either House who realize the great importance of preserving the birds and mammals of this

country. These men are too busy with politics and their official duties to have considered this matter carefully. Their course of action on these bills will, therefore, be merely a question of what will secure them the greatest number of votes at some future election. In other words, if by voting for this measure, a Congressman or Senator can please a greater number of his constituents than by voting against it he will do so. It therefore remains for the members of this League to see that public sentiment is so strongly expressed by letter that these men will be compelled to vote "yes."

The League is now in the act of introducing, through its various Chief War-



J. T. DROUGHT,
Chief Warden Wis. Div.

dens in the 19 States where we have divisions, bills to prohibit the sale of game at all times, and to prohibit wearing or having in possession the plumage of any bird for decorative purposes.

On the whole, the work of the League is progressing satisfactorily. We should have had at least 50,000 members by this time, but, as above shown, great work has been done by many of those we have, and it only remains for all of us to take hold and work diligently to extend the membership.

If each member of the League would send in 25 applications within this year we should have at the end of the year over 50,000 members. Let us see how many of you will fulfill this obligation.

The hotels, restaurants and game dealers in this city and elsewhere are being as diligently watched as heretofore.

We are greatly in need of funds to prosecute a few flagrant cases of law breaking, and if 100 of our well-to-do members would pay \$25 each and become life members they would thus greatly aid in the work.

It is a subject of deep regret that all

members of the League do not wear badges. Our books show that we have sold less than 500 all told. Why is it that the other 1,700 members do not buy and wear badges? The L. A. S. badge is neat, tasteful and in every way desirable. It is as great an honor to any man to wear one of these as it is to wear the badge of the military order of the Loyal Legion. It is earnestly hoped the delinquents in this line will make good their shortcomings in the near future.

The President wishes to express in this public manner his thanks to all the officers and members who have aided him in his work, and especially to Vice-President Hornaday, Secretary Rice, Treasurer Hyatt, Attorney Seymour, Chief Warden Pond and Secretary-Treasurer Curtis. These men have been unceasing and untiring in their efforts to build up the League, and have done their part of the work nobly. If all the others would do their duty as these men have done theirs, we should now have 50,000 members.

G. O. SHIELDS, President.



BUILDING A BIRCH BARK CANOE.

AMATEUR PHOTO BY J. WILSON.

Winner of 46th prize in RECREATION'S 4th Annual Photo Competition.

THE EMANCIPATION OF JADY.

HON. L. A. HUFFMAN.

Lucky Smith, despite the flood of genial February sunshine that poured into the living room of his comfortable ranch home on one of the reaches of the Yellowstone, was waspish, unhappy and irritable. That there was more than a hint of green visible to his unwilling eyes in the sheltered notches of the badland hills across the river ought to have gladdened his sight. That the lowering sky of the evening before had cleared and the blighting blizzard, that he had for the tenth time predicted, was not in evidence, brought from him no expression of thankful satisfaction, though his herds fared upon the open ranges and the winter grazing was uncommonly short. Accounts with which he was engaged lay unfinished. An accumulation of letters, heaped in confusion, gave mute testimony by their dog-eared, soiled and worn condition of the weeks he'd worn them against to-morrow, to-morrow, when he'd answer them. Ah, me! yesterday, to-morrow! So seldom the To-day!

The languor of spring was in the air. A heavily loaded team was passing up the trail. Lucky raised the window and through his field glasses watched the horses labor as the wheels cut deep in the little used gumbo road, out of which the frost was nearly come. The near horse was gray and hooked back, lugging the brunt of the load of rock, with a careless driver perched on top. Why had they not caught up a younger horse to lend a neighbor for such work! Twenty younger, heavier horses were idle in the hill pasture. A horse was only a horse though, and "Western branded" were grown so cheap on the Eastern markets that the last shipment had brought little more than freight and expenses of handling. But Jady! Little, flea-bitten J D! He had

broken him 15 years ago and backed him at many a roundup meet as the best "owners up" thousand pounds of straight grass, barefooted horseflesh on the spot. It wasn't quite the fair thing to a game, true, old saddle horse that had never shirked. Lucky was touched, or he would have been had he not been waspish, and planning at the very moment the "firing of the crowd," the placing of the accounts in a lawyer's hands, shutting up the shack and going back to live with the punchers at the wagon and the mess house.

The kitchen door stood open and from it issued forth the heartsome smell of baking. Jennie and Mollie, housekeeper and cook, chaffed the ranchman as he came and went with a new team of "bronchs" through the back lot, hauling the winter's accumulation from stables and corrals. Their cackling sallies and the chuckle of the wagon were in the old man's ears, but resentment was in his soul. He'd "seen and heard too — much of wimmen 'round a ranch." Only the day before he had entertained a neighbor at dinner and as the meal progressed one of those women piped up with,

"Why, you told us the winter of '77 was the one when the Yellowstone broke in February, but betwixt the Saturday night following and a Monday morning it froze over again so solid that 10 yoke oxtteams crossed safe at the Cantonment with loads of your buffalo hides."

Whereupon had not that Yankee ranchman who had struck the place—"the fawm," he called it—late last fall, without a bed roll, with only "two dolluz and thutty cents" in coin, and an oilcloth war bag containing little else than his scant wardrobe, a well worn copy of *Walden* and some shot gun ammunition—had he not



THE BIG O. W. ON HANGING WOMAN.

PHOTO BY L. A. HUFFMAN



SPUD AND JADY.

AMATEUR PHOTO BY L. W. STACY.

stuck in his yawp to say there was green "grows" in the hills, and that Dock Helmer had told him geese and ducks were appearing, a thing he—Helmer—had never seen before in February! And had not he just been expatiating to his guest of his and Helmer's unparalleled experiences in those glorious open winters of the buffalo days! Helmer, too, was going back on him!

And through the open window, from over the stretches of sage-grown flats, badlands and benches, came ever the soft Pacific wind that at most unexpected times had blown and blown since December. How sweet the odor of the new earth and the spirit-healing scent of the balm of Gilead! Maybe Lucky had been wont to exaggerate about the old time open winters, but he'd stand no more of that sort of thing at his own board!

Then came the distant boom of a shot gun! Shortly thereafter a pair of husky colts came from the direction of the meadow, driverless, careening wildly, dragging part of the overturned wagon. They sailed through the lot and plunged, a mass of tangled wheels, harness and broken bars, at the horse corral. Lucky's pent-up wrath found vent. The kitchen door was softly closed, and the frightened women who peered from the window prayed that the luckless Yankee ranchman, who, hatless, bearing his one poor duck and gun, might delay somehow his steps and the awful penalties that "ought to overtake him and an old — — fool who'd hire a — — tenderfoot to handle bronchs." While they extricated the team from the wreck the old man's final crimson-phloxed

"hellyedids" and "hellyewills" still hurtled; and timidly, for the nonce, comely Mollie came forth and examined the duck and essayed to pour oil on the troubled waters.

"Why, colonel, (Mollie always addressed him as colonel) this mallard's big and fat! Looks like they hain't commenced to nest yit. If there was more of him I would have him in our—forsooth, *our*—patent roaster for Sunday dinner."

And it came to pass that while the crest-fallen ranchman mended broken gear and moralized, and in extenuation explained again to the women how "the medder was black with pintails and mallards," and he couldn't withstand the temptation to pot enough for a mess, to vary the monotony of beef and bacon; and how when he had tried to approach the fool colts again they smelled the gun or something, got "snorty" and scattered on him, Lucky took down his hammerless that had hung uncared-for many a day. The next day was the Sabbath, and the foreman was up from the cow camp for dinner. There was roast duck; duck with onion stuffin'; duck with wild plum jelly; and as they sat at meat one spake and said.

"I reckon we will have the earliest grass since '81." Given courage, another reckoned the buds were swelling. At the same feast it fell out that Buck and Twobelly never hurt a thing when they ran and would soon be as gentle as cats again. And Lucky Smith said to his foreman,

"Would you mind sending Spud over to the old B bar this evening after Jady?"

When he was alone with his after-dinner pipe he soliloquized,

"The Penobscot"—every man Jack at the cow camp called the Yankee Penobscot—"is queer, but he faces the music and never smokes them damn'd cigarettes about the ricks or stables, or cusses, or beats a hoss. Jennie is no longer young," and she had been kind and faithful when the world had not wagged so well as now; when debt had hung heavy and had soured the best years of his hard, lonely life while awaiting the completion of the canal that was to water and make valuable his lands. Mollie's folks had neighbored there, but, grown weary and disheartened with waiting, they had drifted first to the town and then to the bad. Where might Mollie drift if he sent her away! Drift! How some things refuse to be forgotten!

I know not where his islands lie
Or where his fronded palms and shade are;
But I do know that I can not drift
Beyond his love and care.

The school girl Mollie of his youth, who'd said the lines to him, had long since passed away, and he was a bachelor ranchman at 60.

"Stringer reckoned I'd best come in and ask what you'd have done with Jady whenst I bring him down."

Spud was one of the boys that wait at the cow camps through the long winters for the spring roundups to begin. "Riding grub line," he called it; braiding rawhide ropes, hair cinches and hackamores. The scuff of Spud's chaps and the clank of spurs had broken the thread of Lucky's retrospection. The 2 men went out to look at the horses. Later, when Spud was unsaddling at the cow camp, he said to the foreman,

"String, old boy, I'm giving you the line-backed truth. The old man says to put the little gray with the brood mares and see that he has the same ration and shelter in bad weather. And be good enough to tell M-i-s-t-e-r Stringer he's not to be used.

"I thought," continued Spud, "that Lucky was pickin' a load into me first; but when he told me he roped on that hoss before he owned a brandin' iron and that a hoss that was good enough to pack him on the Goose Creek stampede was **too** — good to haul stuff with, I seen he was serious."

The curiosity of the punchers was not a whit lessened the next day when Stringer all mysteriously hooked up a buckboard and brought Doc Helmer to the Mule Shoe.

Helmer was eking out existence on a dry ranch a few miles back in the hills, and here, as I recall it, is the story that worthy told me, months afterward, as he drove me toward the railroad one October

night, behind one of Lucky Smith's teams that carried me to and from the Mule Shoe for my annual bit of duck shooting.

"There's been plenty and more of rank guessing going on since Lucky went to the States last spring, and some of these dug-out ranchers along here begin to realize they lost a good friend that day.

"Cuss! Well nobody knows better than I how hot tempered and explosive he was, or how unreasonable he could sometimes be when things got crossed; and there ain't er'y man holds the edge on me sayin' how, when it was all over, he could be depended on to halve his last side of bacon or his last 50 of flour with a neighbor.

"Look at me representing a red buckboard and gettin' half of the net stuff off of the best hay ranch on this old river! Last February wasn't I holdin' down old Satchel Belly's place and cookin' my own chuck? Lucky sends Stringer up after me and when I saw these old sorrels comin' my way that day I just wanted to die. I says to myself, 'Your old pard Smithy, he's goin' to call you for your last chip. Your note's 4 years past due and you can't cut the mustard.'

"Couldn't get a blame thing out of old Stringer. Lucky just wanted to see me if it wouldn't be too much trouble.

"When I got to the ranch I saw in a jiff I was off my base about the note. Something big had hit the old man. I could see it in his eyes. He kep' me a-guessin' till after dinner.

"'Doc, old man,' says he, 'I guess I've turned the corner.'

"Then he flashed up a letter and went on to tell how he'd had hell there the Saturday before and come within a throw of shuttin' up the whole shootin' match to let his creditors do the worryin' for a spell; and how he went down to the mail box just to walk and cool off after cussin' everything to a standstill. And there was a letter with an offer of—I ain't to tell how much—for a half interest in his Black Butte claims, that he went broke tryin' to improve in the 70's. The last place I ever expected to pan a splitter out of!

"'Doc,' says he, 'if you'll stay here and look after the ranch I'll go up and make the deal. If it's a go, you're next to run the granger end of this ranch if you want the job.'

"At the end of 2 weeks he was back and he sure had the stuff, and the way he loosened it up for a while made some of your neighbors, who'd been tightenin' the strings on the Mule Shoe property for years, jump sideways. When he told Jennie she could go back to her old Vermont home and take Mollie along and

give her the best schoolin' money could buy, the old girl nearly fainted.

"I wonder how many of us would do the things we're always dreamin' we'd do if we got hit with a wad?"

"It's only a little while ago, seems like, since I fell in with Lucky, freightin' on the lower river. We've both had our innin's pullin' each other out of tight places durin' the last 20 years. He never'd strike a good thing that he didn't want to let me into it. We've had our differences, too, and divided our grub stake once when it nearly cost us both our scalps. That was the trip that queered my gait for life—feet ain't mates,

snow was nearly all gone. The buff disappeared with the snow; so for a long while we hadn't much to do but lay round camp, gettin' crusty as bears with each other, and lookin' at the carcasses, carcasses, everywhere, uncovered by the thaw. One mornin' Lucky thought he sighted the herd again, and took my saddle horse, Poncho, the only real horse I ever threw a leg over, and rode out to take a look. What did he do, when he got off to stalk a little bunch of cows and spikes, but tie Poncho to a frozen bull that we hadn't taken the trouble to skin. That was the end of poor old Poncho. Left alone with the whistler, he got rattled,



PHOTO BY L. A. HUFFMAN

CARCASSES, CARCASSES EVERYWHERE.

you see; froze 'em goin' to Keogh for help. It was when we built the dry house over North. Just got her finished when the snow fall and 40 below zero brought the buffalo our way by the thousands, and we went at it hammer and tongs, skinnin', picklin' and hangin' good old hump in the dry house. Lucky was handy with a Sharps rifle those days.

"We had each a .45-120 and an extra for luck. For 3 weeks we had big killin's strung out in sight of the shack every day. Pack horses got too slow. I taken poles and dry hides and rigged up a pung that would carry half a ton of meat, and the way we cut and slashed daytimes, run bullets and worked our reloadin' outfit nights was a sin. Then one night I remember our dugout seemed to get hot as an oven and we opened the door and listened to the steady roar of a sure enough 'chinook,' which blew till the

wound up in the lariat and fell back, drivin' one of the horns deep into his vitals. There Lucky found him dead. When he tried to explain there was trouble. Things got strained to the danger line, and we whacked up in an Injun country 60 miles from any place, in midwinter. About that time, though, Providence, in the shape of a band of Spotted Eagle's young bucks, sighted the smoke from our dry house, and dropped in on us while we were makin' the divvy.

"But yonder light is your station. Mighty glad you came out. I am goin' to make it my business to fetch you again about Christmas. There won't be any ducks, but there's goin' to be company and doin's that you'll want to be in with. The Mule Shoe'll be glistenin' for once, and may be we can get Luck to tell you how he got his limp and a rough ride on the pung."

WHY THE BIGGEST ONE GOT AWAY.

GENE S. PORTER.

"How hast thou escaped me?"

It may seem peculiar for anyone to fish the Wabash. Once the river was crowded with bass, redhorse, pickerel and suckers. Now a dozen good bass in a season is a large catch, while the pickerel and redhorse are almost extinct, and a good sucker is scarce. Anglers usually land a

Molly-Cotton goes because she is bubbling over with the wine of life and the pure joy of living. She likes to patter barefoot over logs and stones, wild flowers in her hands and hair, and as glad a song as any bird's in her heart. She likes to lie on a log and with a tiny line fill the



AMATEUR PHOTO BY GENE STRATTON PORTER.

"CREEP WITH A CAMERA ON SOLEMN BITTERNS."

catfish or that most detestable thing, a carp. So if only fish were desired it would not pay to go to the Wabash. But there is the beauty of the river, sung by poet and transferred to canvas by painter, making finest food for the camera, and a feast for the eyes of a lover of nature.

There are diverse reasons why we go to the Wabash. The Deacon goes to clear his mind of eternal columns of figures. He is content to fish all day and go home empty handed; and quite as eager to go the next time as if he had caught a full stringer and had his picture taken.

minnow bucket for her father's bass hook. She sings with the birds, plays with the chipmunks, and fraternizes with her namesakes, the shy little brown Molly-Cottons along the snake fences. She digs roots for her wild-flower bed, anemone and trillium, violets and Dutchman's breeches, bluets and columbine, and goes wild over a jack-in-the-pulpit. She wades to her waist sailing birch canoes, manned by fierce Indian dollies, and hunts rare pebbles and shells. She lunches like a farmer, and sleeps the sleep of the untroubled. What more would you for childhood?

As for me, I go to the river because I love it. I love every bend and curve of its sinuous course and the bubble and flash of its eddying water. I love the sycamores, poplars, willows and maples that fringe its banks and the beautiful wild flowers and mosses that grow along its logs and fences. I love the song birds that flash in streaks of blue and gold and scarlet and brown across its waters, and nest in its willows, filling the air with heavenly melody. I love to catch glimpses of gaunt blue herons, fishing among the rushes, and try to creep with a camera on solemn brown bitterns, eying muddy pools anxiously for signs of luscious fat worms. I love the bark of the squirrels, the rattle of the empty nut shells they fling away, the whistle of Bob White, and the stilt-legged kildeer's call. I love the ripple of the water, the music of the wind among the willows, and the sweet breath of clover, wild flowers, and damp growing things.

Going to the river means going home to me, going to the real home God has prepared equally for all his children. No prince with his millions can have more fully than I the green grass of my river. No queen owns a larger share of heaven's blue and the soft summer wind than I; and the millionaires may keep their gold. Is not all the gold of God's sunshine mine? The home I love best is carpeted with velvet grass and fern; frescoed with fleecy clouds on vaulted dome of blue, and furnished with all the wonders of flower, tree, moss and vine. "Tongues in trees, sermons in stones, books in the running brooks, and good in every thing."

Just to be alive and go to the river is enough; that I own rare books, a camera,

a rod and reel beside, is my great fortune. So we go to the river at every available opportunity.

On this particular day we went because the Deacon had a holiday. We did not expect many fish. Molly-Cotton stretched herself on a log under a big maple and fished for minnows. The Deacon worked 2 hours before he was quite fixed. The "fixing" of the Deacon is a process. He baits a strong hook on a stout line attached to a cane pole and sets it for suckers to nibble on. He fixes another, somewhat similar, and sets it on the bottom for catfish. Then he wires an enormous hook to a young clothes line, baits it with a wad of worms and meat, and throws it in the center of the deepest pool, tying the line to a stake on the bank. This is for a patriarchal turtle he has tried 3 years to catch; possibly in 3 more he may succeed.

The last process of "fixing" is a dainty lancewood rod, reel, silk line and live minnow. I am aware this looks as if the Deacon might be qualifying for a fish hog, but it is not the case. He stands on the end of the boat and casts, up, down, and across, whizz, whizz, 60, 70 or 100 feet and gets possibly 6 good bass in a season. With all his arrangements and Molly-Cotton and me fishing beside, we never took 12 fish in one day in our lives.

I had exposed 2 plates I had hopes for, and was sitting on a grassy spot in the shade of a thorn tree, when the line on my stout cane pole straightened out and my rod doubled up under one of the strongest bites I ever had. I started down the river, followed by the Deacon and Molly-Cotton, and for 10 minutes my fish cut pigeon wings, up, down, sidewise and across. I could not get him near the bank and there



AMATEUR PHOTO BY GENE STRATTON PORTER.

MOLLY-COTTON FISHED FOR MINNOWS.



AMATEUR PHOTO BY GENE STRATTON PORTER.

A SUCKER IS NIBBLING.

was no use trying to lift him. Molly-Cotton sprinted back for the landing net, and the Deacon forgot his usual calm, and shouted instructions. My wrists began to ache, and the Deacon yelled for the fiftieth time,

"Keep your line taut! Don't let him break water! Work him lively. Watch out for that stump! Play him deep!"

I hung on to the pole, unconsciously working down the river, until I came to a big, half-submerged log, lying along the bank and out into the river. I mounted the log and started down; the fish turned straight across with a grand rush; when he came to the end of the line there was one sudden pull and I went in. I lit in water half to my waist, but I kept erect and hung on to the pole. I heard Molly-Cotton's scream, felt rather than saw the Deacon's rush, and realized dimly that for the first time in my life I had started fishing without my fishing clothes. A pair of patent leathers were slowly sinking in Wabash river mud, while from the way in which my dry goods floated I suspected I was ruining a silk petticoat. The Deacon grabbed me in the back and began to lift. Then for the first time I raised my voice:

"Let me alone. Take the net and climb out on the roots of that stump and see if you can't land him." The Deacon flew. Hope rose strong in my breast. He could climb out well over the water on the roots, and the net had a long, stout handle, that

would allow dipping deep to meet the fish. I rounded him up slowly but surely. He was within a foot of the surface of the water when whizz, straight toward me a yard, a leap clear of the water, a double, a jerk, and he was off up the river.

Firmly anchored as I was in the mud, he almost pulled me over, and the Deacon lifted a white face. "He's every ounce of an 8-pounder!"

"I've got him yet," I gasped, but I was worse played than the fish, and that horrible muddy water was soaking up my garments as if I were dressed in sponge.

"Try him again," suggested the Deacon, and once more I worked him for the stump. The Deacon leaned over and watched breathlessly. Molly-Cotton's eyes blazed with excitement, and a cardinal grosbeak, swinging on a tulip on the opposite bank, whistled an ear-piercing "Wet year, wet year," or possibly he made it "Wet here" in deference to my soaking condition. I was not capable just then of making nice distinctions, and he may have been having fun with me. My fish repeated his first game so skilfully that as he rose and doubled for his jump the line snapped back and he went free.

The Deacon and Molly-Cotton pried me out. They washed my shoes and rinsed my clothes. I retired behind a thorn bush and draped the classic lines of my figure in linen carriage robes while my skirts were spread to dry.

Presently the Deacon came to me, bearing a hook in his hand.

"Your hook was defective," he said. "It's broken squarely off in the curve, and you can plainly see a defect in the metal. If the hook had held you would have got him."

He cut it loose and dropped it in my hand. He was right. There was the larger part of the hook, and the flaw and the bright new broken part were plainly discernible. It comforted me strangely, and I laid it carefully away as proof of how I had lost my biggest fish in the Wabash.

I had fished ever since I cut suckers from the apple trees for poles with the bread knife, and used cotton cord lines, and bent-pin hooks, and hoed the worms for bait from among my father's cabbages. Where were my biggest ones? Gone back to their native element.

There was another day, on a Northern lake, fishing off a dock. I hooked as big a bass as this, and I was 5 feet above the water, with a cane pole and a rotten line. I kept him 15 minutes. At last, when he was too tired to even try to run, I lay flat on the dock, ran my hand as far down the line as I could reach and tried to lift him. The line broke and he sailed away, with some 3 feet of it waving "Fare ye well!" in graceful curves over his back.

My first big fish was a 10-pound pickerel, hooked on Mullet lake, up on the inland route. I had fought the battle alone, had hung on and had landed him. He gave one mighty flop and I thought he was going to clear the boat. I threw myself on him, full length, and hugged him desperately to my bosom, and held him until the Deacon manufactured a stringer out of the stoutest trolling line in the boat, doubled, and put him back in the water. Then I arose, fish slime from my chin to my knees, but with victory singing her war song in my soul.

We were stopping at Pike's, of Topina-bee. Hod Pike had an attractive way of spreading a fish's jaws, pickling the head and mounting it on birch bark covered boards. He had said that if I got anything at all fit he would be glad to fix it for me. I had said to the Deacon that if I got a fish as large as even the smallest one in the office I should be proud and happy. While I wrestled in the boat bottom I had found voice to ask,

"He'll do to mount, won't he?" To my delight the Deacon replied,

"Sure. There's nothing bigger in the office except that sturgeon head."

A little later, while I was trying to decide whether I would put my trophy beside a deer head in the hall, or hang it over the dining room mantel, a boat bearing an insurance man from Chicago, named McKensie, came by, and I called him up to see my fish. I got to my feet, took the stringer in both hands, squared myself for a lift, and it flipped up in my face, sawed in 2! It was 10 years ago, but I can hear that man's ringing laugh yet. No doubt I looked funny, between the disappointment in my face and the slime dried on my clothes; and Solomon with all his wisdom couldn't have told how that fish got away.

This Wabash bass made the third big fish I had lost. True, I had landed many large ones in the meantime, that fought fiercely and weighed enough to satisfy anyone; but the weight of the ones you don't land is problematical. They pull so hard, and look so big in the water, and you long so to save them!

Without any definite purpose I rolled a clay ball from the damp bank where my shoes had dripped. I was careful with its construction. It was large, round and hard. Then I planted that hook in the middle of the ball and laid it in the sun to bake. A few hours later, clothed, and in my right mind, I whizzed it at a turtle on a log in mid-river. Hit it, too!

Somehow, I couldn't settle down to fishing any more that day. I took a camera and went where the woods were damp and cool; where shy squirrels barked and ran their fleetest; where brooding birds waited the coming of happy motherhood, and wild flowers filled the air with sweetness.

When packing up time came I noticed the Deacon hunting about, and asked him if he had lost something.

"I can't find that piece of hook," he said. "I wanted to save it."

"Did you see me hit that turtle with a mud-ball?"

"Yes."

"Well, that hook was in the midst thereof."

"What did you do that for? I wanted to show it to the boys."

"And get insulted for your pains! No one believes those stories."

"That's so!" said the Deacon.

"George," she cooed, "why can't we get married next Sunday?"

"Well," hesitatingly replied the recalcitrant but manly youth at her side, "we could, I s'pose, but it may rain Sunday."

"George, if it rains Sunday couldn't we get married Saturday?"—Judge.

FOREST PROTECTION.

JOHN C. GIFFORD.

According to the latest and best authority, 37 per cent. of the land area of the United States is in forest. Our forest resources are still considerable. It is not necessary at present that we should enter into vast planting operations. With proper care and judicious cutting, the 37 per cent. of forest area is quite capable of yielding forever an immense supply of timber in almost every form and of every kind.

Few subjects are of more importance to Americans than forest protection. It is useless to attempt modern forestry methods, adapted, of course, to American conditions, until at least a small degree of safety may be assured against conflagrations. Of the many agencies destructive to the forest, fire is the first and most important in this country.

* (1) THE CAUSES OF FIRES.

Fires have played a much greater role in molding the nature of the surface of the earth than is ordinarily supposed. Great conflagrations have occurred on this continent for many ages, no doubt before mankind existed.

Lightning has been, and is still, a common cause of forest fires. Although of little practical importance, it is of passing interest to note other natural ways which have possibly produced fire in the past and which produce it, perhaps, to-day at rare intervals.

When one sees how easily fire can be produced by rubbing two pieces of wood together, it is not a rank supposition to infer that the same occurs sometimes in nature. In fact, records of such causes are not uncommon. Captain Geo. S. Anderson, U. S. A., in charge of the Yellowstone Park, in one of his reports says that fire caused by the rubbing of two trees together by the wind is not uncommon. Mr. A. G. Theobald, who lived many years in the jungles of Southern India, assured Mr. W. T. Hornaday that fires often occurred in the Animallai forests from the rubbing of the bamboos in a high wind.

Mr. Geo. Goodfellow is authority for the statement that fires were caused by the friction of sliding boulders during an earthquake in Arizona in 1878.

There may be other causes, chemical in nature, to say nothing of fires from volcanoes, which are, of course, not infrequent in volcanic districts.

Spontaneous combustion is not uncommon in hay mows, cotton bales, masses of

wet coal, and in piles of rags or tow, especially when oil is present. In tropical countries garbage piles sometimes take fire spontaneously.

At any rate, there are evidences of fire in the forests on this earth of long standing, and it has been without doubt a very potent agency in molding the nature of the surface of this globe.

Before the great fires of Minnesota in the late summer of 1894, according to Mr. Ayres, the dead material became so dry that when pulverized and sprinkled in a flame it would ignite with an explosive flash. Add to this a hot, dry wind, an air filled with combustible gases and dust, and the conditions are right for the slightest spark to ignite this tinder.

Mason, in his book on the "Origin of Inventions," says: "The splendid victory of man over the earth was achieved literally with the firebrand. The memory of conflagrations seems to haunt the dreams of bears and jackals and tigers, and all ferocious beasts. The naked African has only to kindle a little flame and lie down to sleep among ravenous lions. The wolf, the cougar, the wildcat, were long ago taught the hopelessness of resisting its fury. Great hunting excursions were made successful by setting the grass on fire. Venomous serpents and insects and bitter enemies of man, visible and invisible, had to yield to the brand."

With the implements of modern times man no longer needs fire to help him subjugate the wilderness, although it may often be used by the forester to good advantage if kept under control. The human race has passed through the first stage of progress in the development of the simpler arts of life, and through the second stage, which is the domestication of animals and the cultivation of plants, and is entering now upon the third stage, which embraces the subjugation of the wilderness for the production of perpetual wood supplies and the reclamation of the waste lands of the earth.

Although the savage in many countries still burns down the forest, plants his crop in the ashes between the charred stumps, and when the fertility is exhausted moves to another spot, the tendency of the times is to form permanent homes and develop more extensive methods, both in agriculture and forestry. This method of clearing the land reminds us of the "log rollings" in this country, and the time when trees were burned solely for their ashes.

* The next two papers will relate to the effects of fire and to the methods of preventing and extinguishing fire.



THE EFFECT OF FIRE ON GOVERNMENT LAND IN OUR WEST.

Our Indian used fire freely in order to make open places for game, to improve the grass and berry crop, to produce fresh withes for basketry, and even to kill the grasshopper upon which he fed.

Even to-day fire is often set by ranchers to improve the pasturage. Often in the spring of the year as you approach the Gulf coast of this country from the sea you will see the heavens aglow with the light from forest fires which have been set by the cattlemen. The custom is almost universal, and its effect is ultimately to convert the land into great prairies or savannas.

Just so have the natives in many parts of this country learned that young berry bushes bear larger and better fruit than older plants, so that fires are often set to prune them; and the perpetrator of the act, although the fire may cause no end of damage, and although the land may belong to another person, often feels that it is the poor man's privilege and resents the law that strives to punish him.

Then, often fires are set with malicious intent. These are usually the result of quarrels and represent a crude method of venting revenge or jealousy. Fires are often purposely set by wood thieves to burn the slash and hide the stumps.

Some time ago, and perhaps in certain districts to-day where the charcoal industry has been or is still practised, fires often occurred, but many were purposely set by the burners in order to buy the wood at a low price—charred wood was fit for charcoal, but unfit for other purposes.

Fires are sometimes set by children and weakminded persons with no other reasons than to see them burn.

Fires are set through carelessness which often borders on maliciousness, when, for instance, hunters leave camp fires or farm-

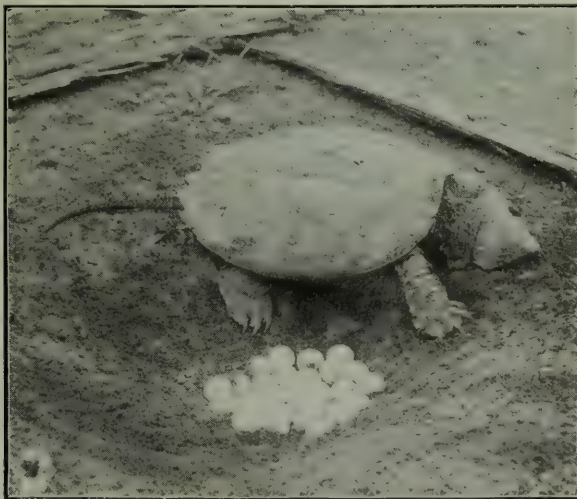
ers while clearing land burn brush at a dangerous time. At other times they may start from a combustible gun wad or from a lighted cigar stump. They are often set also in smoking out wild bees or in dislodging an animal from a hollow tree.

Another fruitful and wholly inexcusable source of fire is the locomotive, which staves through the forest emitting often a trail of fire which under certain circumstances, especially when laboring up a grade, is equal to a display of fireworks. Fires are set also from live coals which drop from the grate, and, striking the ties, bound into the combustible litter by the side of the track.

Although there are many fires set through carelessness, the fault is not always with the person who sets it, because even the most thoughtful are sometimes lax, but with the lumberman who leaves in his wake an immense amount of rubbish which is appropriately called "slash."

This slash consists of the tops and branches of many trees. It covers the ground in many places in great masses. It becomes as dry and inflammable as tinder. The living trees left by the lumberman are buried in the midst of it. A lighted cigar thrown thoughtlessly by the wayside is sufficient to ignite it, and in less time than it takes to tell it a fire is produced which sweeps with resistless fury over the ground, leaving desolation in its wake. This is the inevitable result of our methods of lumbering.

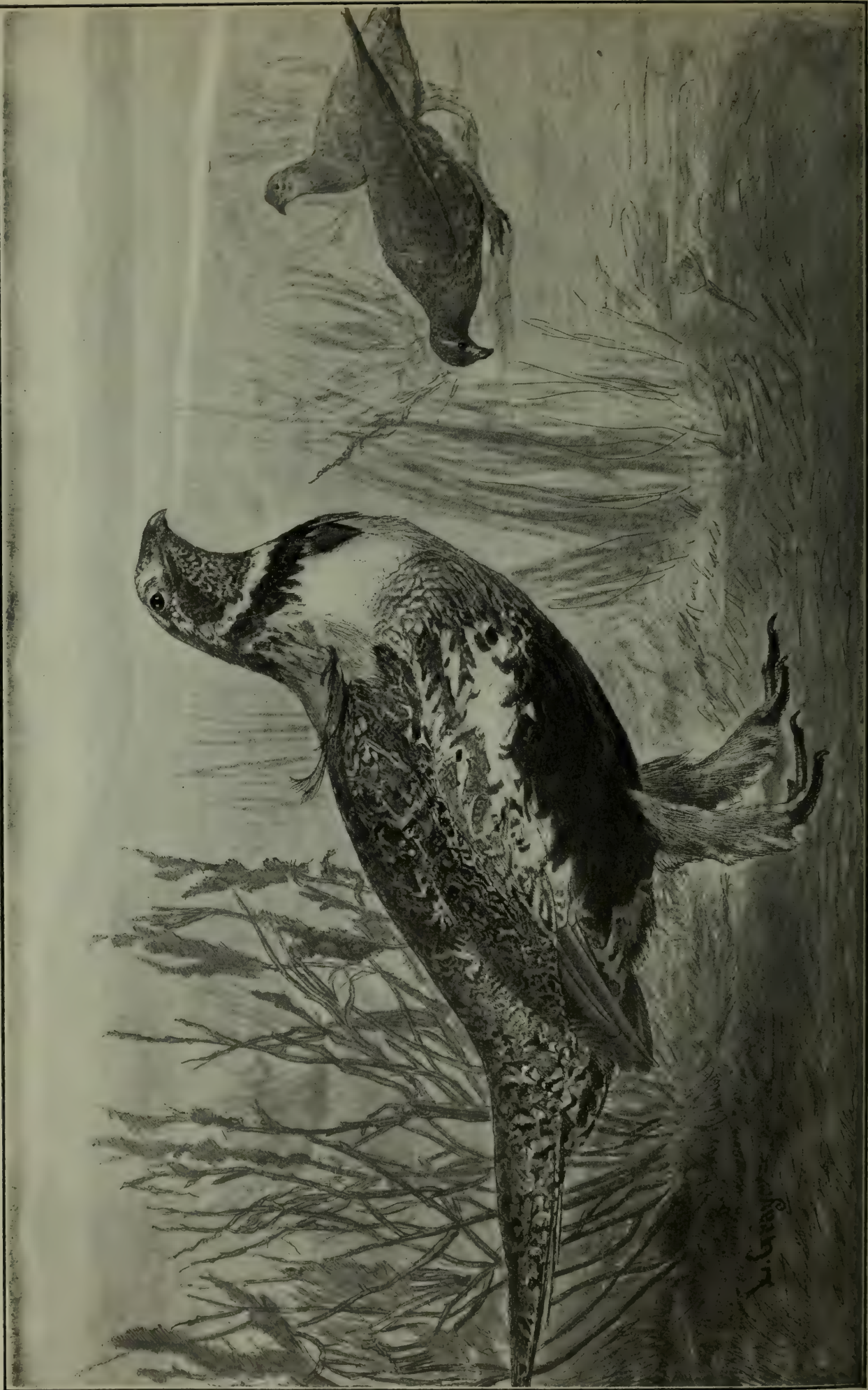
An enumeration of all the causes of fire would fill much space. They may be due to a locomotive, a madman, a careless boy, an incendiary, and even in war to sun glasses; or, it is said, even to desperate rebels who have fastened slow matches to the tails of serpents. The effects, however, are the same.



AMATEUR PHOTO BY R. E. PRESCOTT.

BLACK TURTLE AND EGGS.

Winner of 39th prize in RECREATION'S 4th Annual Photo Competition.



SAGE GROUSE, *CENTROCERCUS UROPHASIANUS*

IN PARADISE.

E. J. MEYERS.

Ken ye the lan' o' the laight grey skies
Whaur the green pine nods an' the wild bird cries;
Whaur the heather blooms an' the gowan blows,
An' sweet is the scent o' the wild briar rose?
'Ken ye the lan'? I am fain, I am fain,
Tae see the blue hills o' my ain lan' again!

The wild billows that rage in winter and the surf that prevails in summer have eaten the West coast until they beat against the base of the mountains and form the bluff tableland that stretches from Port aux Basque to Baie St. George. The train, perfect in detail of dining car, buffet and sleeper, takes its way from the port, which the Spanish pirates found, and which to this day is famed, with no little annoyance to the law, for the rum and Madeira that find an entrance without custom. Thence, overlooking the brown sails of the skiffs and smacks off shore and white sails afar; the huts and cabins of the fishermen on the shore, and the blue gulf and white billows reaching to the horizon's rim, "where like a shoaling sea the blue plays into green," the iron pathway runs between mountain gorges and down prehistoric waterways which have anticipated surveyor and builder and prepared the road for the irons, as the Newfoundlander calls the rails. Across the Little Cod river, famous for sea trout, not salmon, and up the Grand Cod Roy river, which is crossed near the lake, the train pursues the iron road. From the easy cushions of the palace car one sees the celebrated pools of the Grande river, and doubts the wisdom of pursuing the will-o'-the-wisp when known sport is at hand. Long as the memory of the oldest inhabitant reaches, the visits of the officers of the British warships to the Overfalls are known; and there likewise came Prince George, with bishops, deans and humbler sportsmen, simple anglers, like myself, following after. There is Big Salmon pool, and there is Mollie Chigaunay—call it, as I did, Mollie's Chickens. Then come the Forks, the Dean's pool, etc. The salmon in the Grande river run to 30 pounds, and royal sport may be had on its waters, which I faithfully fished for 5 years. In the largeness of the angler's heart I give the name and address of Clement Doyle, Island View, Codroy, and Postmaster Smith, of Channel, Newfoundland, to whom every reader of RECREATION is welcome to write for further details.

Eighteen miles from the sea, where Harry's brook pours into St. George's bay, the train leaves the shore for its way across the island. At the Bay of Islands the railway takes along the banks of the Humber, and I have heard world-wide

travelers say this stretch of scenery is unsurpassed. In my own ken it is unrivalled. Mountain encroaches on mountain only to be divided by the tremendous flow of water that drains 2 great inland seas, each as large as our Great Lakes; yet in the Ancient Colony they are all called ponds. Nearly a score of years ago in going up the Humber we had to warp our way through gorges that never freeze, even though as far North as the 49th parallel. In its tremendous rush to the sea beneath the shadows of the mountains the water seems jet black, like ink, and under the pressure is glacé in its smoothness. Along the shores, forming caves of great distance, are marble masses, white, black, green, brown and red mottled, with here and there silver deposits gleaming in the sun. Between the Humber and Harry's brook are the Great Barrens, over which the train speeds, and there abound the herds of caribou.

The train stops at Paradise, leaves the "Missus" and me, provisions, tents and guides, Clem, Tobin, Tomas and Andre, and goes on. We are the first settlers in Paradise, and must build ourselves a home. Save now and then a stray officer from Her Majesty's warships, the waters are virgin, and, save for a hunter more rashly venturesome than even that strange land can recount, the Barrens know not the human voice. Without a foot of meadow land or intervale, the river flows down through the mountains precipitously stooping from peak to base, and zig-zags an eccentric course whose turns form pools from Long pond to the bay, in itself a great arm of the sea.

Long pond, a beautiful sheet of water that reminded the Missus of Lake George, and me of the tarn Poe describes, is where the salmon rest on their way from the sea to the spawning grounds, and where they may be seen leaping all day until late in July, when they start for the spawning beds. From the broad veranda of the log cabin one may see salmon break the water until desire can brook the sight no longer. Through the great intervale around the house flows Spruce brook, full of trout; and 7 miles away, over a carry well constructed by Dodd, of the log cabin, lies Serpentine river. I know few sportsmen who have been to Serpentine river, but each of them says the same: That great are the rivers Nepigon, Cascapedia, Augustine, but there is still the Serpentine. A great New York sportsman awarded it the palm, and one of the best-known au-

thorities on the *London Field* said it was the only river he had fished that sated and surfeited. Up to last year a visit to the Serpentine only required a private yacht and a corresponding income, the best of weather for a landing from the sea, and then good luck and equal good weather to get away again. That, at least, was my experience, minus the yacht and the income; for I went up in a sealer, with the "smells of Cathay" turned putrid, and all the insect torments turned loose in bunk and everywhere else. Now, thanks to Dodd and the trail from the log cabin, there is another story.

We built our house of canvas and spent the days in getting ourselves within the jurisdiction of heaven's first law—order. In front we hoisted the American banner and the British standard, and heard, day after day, the engineers salute the flags. From the railway to the river we cleared the way so as to have an open draft of the wind which would blow the flies and mosquitoes into the river, we hoped, and permit us to see the trains pass.

No more accommodating officers than those of the Newfoundland railway system ever lived. They will pick you up on signal, be the train express or accommodation, and as obligingly set you down wherever you wish. I recall flagging the train and having the conductor put my Gaspé 30-foot canoe in the passenger coach because it had to go in the end of the car lengthwise. That was when I was running down the lake in a driving rain storm on my way to Fishel's brook, and all of us were wet through. That was when Tobin declared he would not be afraid to cross the gulf in the Gaspé canoe, which was an ultra statement for a devotee of the dory. For old Benoit, of the brook, said, "A life boat will roll over and drown, but a dory will float until it brings the dead fisherman ashore." It was Tobin who heard the train in the distance, in itself a marvel, and we paddled across the lake with might and main to flag it. I was cold and wet. The company's doctor gave me *aqua vitæ*, and the conductor gave me some lunch, while both insisted I turn the coach into a dressing chamber, by stretching a blanket across the car, and put on dry clothing. At midnight they left me at Fishel's brook, at the first pool, down by the sea. It was raw, cold and rainy; and we had to put up a tent and build a fire where we could scarcely find drift wood.

Up and down the railway we walked, from pool to pool, without danger, as we learned the schedule time and no special ever went by without full warning. Likewise did the caribou and bears use the track daily, so that the novelty of fresh signs soon wore off. The express for

Port aux Basque ruthlessly killed a young caribou one evening and carried the remains on the cowcatcher; then crossed the bridge and threw them into the brook.

The Missus and the lady caribou met next day on the railroad track, when the former was pensively enwrapped in thought and idly wandering up the irons for exercise. The lady caribou was within striking distance of the sunshade madame carried, while farther on the lord caribou stood in the running brook. The shrieks of the Missus made Tobin dart through the tent, grasping his rifle, while I threw down my salmon rod, regardless of tradition and principle, jumped up, seized an ax, and fled after Tobin; but the lord and lady caribou had vanished. Then we went back to camp and soothed the Missus, but my deepest feelings were for the dam that had traced her dead to the brook.

Along the margin of the stream the long marks showed where the bears crouched on their bellies at the head of the pools, fishing for salmon in most primitive fashion. Across the brook, leaping from rock to rock, is the dumping ground. The flying canoe descends in the wild whirl and eddy of waters upon Fox and Lucifer crossing the brook! Up and down the waterways wild fowl, geese and ducks, often with their young broods, come and go, almost without fear. Just below the camp a hawk's nest is full of young birds, whose cries may be plainly heard when, heavily laden, the parent bird comes in from the sea with the fish in its talons. The law of the jungle obtains:

"Ye may kill for yourselves and your cubs as they need and ye can;
But kill not for the pleasure of killing and seven times never kill man."

The Missus and Tomas had gone up the track to fish for speckled trout where North brook came down the mountain side, first getting my promise to send Tobin after her if I stabbed a salmon. It had been a day of heart-breaking disappointments, and the lady had departed because her store of consolation was in danger of giving out. Not a rise, though I tried and tried again. Not even a salmon in sight. I had broken a leader, lost flies and warped tips by long casts from the shore to reach a bit of water on the farther side. Tobin had gone up on the bank to watch the back cast, and called to tell me I had a rise. I reeled in, trying to fix the length of line with some definiteness, and sat down. Oh! if for the lover time hangs heavily, it stands still for the salmon fisher, waiting the prescribed 5 minutes before another cast is made for the salmon! Out goes the line; longer and longer. It surely must be out 80 feet, yet Tobin insists I have not covered the spot where he saw

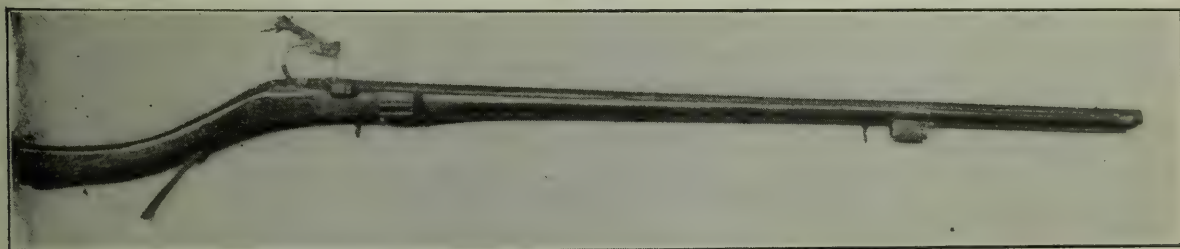
the salmon rise. It seems to me as if my fly must hit the tree tops away up on the hill or catch the wind and reach the farther shore; but Tobin is remorseless for more line. His ideas of distance and mine are in utter conflict, and I am thinking my line will reach around the world if he does not soon stop calling for more. He sees the swirl of water from the height, and cries out, but I have felt that indescribable something which is more vibrant than the electric spark and more thrilling than the glance of dark eyes! Yet the salmon broke water ere Tobin's voice reached me or the vibrant thrill had stopped! Up the river went that salmon, and I down the river, until Tobin's cry made me scramble up the bank to get a taut line. Then the quarry was well in hand, I answered Tobin's eyes, and he started for the Missus. The Missus insists the quintessence of angling is landing the salmon, while I only love to make the fish take the fly; the rest I cheerfully give to her. To me the keen zest is to pick out some quaint, undersized fly, far removed from the lauded Jock Scott and its ilk, or in dark, murky flood some huge bug, and cast till the salmon rises; while to the Missus the art lies, not in dragging the salmon ashore, as though with chain and windlass—that is the desecration of the reel—but in fighting the fish until it is so tired the guide can almost pick it up with his hands; until net or gaff shall be used to mercifully kill the quarry.

But the salmon had a will of his own, and a scream of the reel told me I must take care or the Missus would be disappointed! Another rush and the fish broke water over on the farther side. Then I had all I could do to take in the slack. In with the line until the rod bowed low down and the fish was near, as the direction of the line showed. I waited, without relaxing the strain, for it is dangerous to let up on that for an instant. He was a sulking brute, and "it was time and I" against the salmon without fear of tackle or rod. I tired of the strain and carefully struck the butt on a rock to start the fish. Then I tugged the line sharply, a most dangerous thing; but the salmon did not move. I

began to ponder, and, pondering, to fear, for I could not move that line from where it went down beneath the water. I realized the jig was up, the salmon was gone and the fly was caught in the bottom. I thought of a lady who might not accept my excuses and who would certainly sneer and jeer if she did no more; and I laid the rod down on the shore in disgust. I pulled off the line freely from the reel and again tried to loosen the fly, without lifting the rod, by walking up and down. My only thought was to escape some of the remarks the Missus was sure to make. In vain! The Missus and Tobin arrived, the former breathless and excited, the latter eager and elated; but they exchanged glances when they looked at me and saw the rod on the shore. Put in words it read, "H'm! Lost another fish because I was not here!"

However, the Missus was rather more amiable than I expected and bore her loss with good grace. She tried unsuccessfully to get the fly and leader out, and after all efforts failed we sent Tobin to the camp for the canoe, while I got a few suggestions on the art of how to handle a rod with a salmon on the fly. An hour later Tobin came up the river and the Missus climbed up on the bank with the rod, to straighten the line, that Tobin might see where to take the canoe. The canoe approached over the fastened fly, when Tobin shouted and the Missus screamed. The salmon was going down the stream to the sea! Down into the canoe the Missus got, and skirts were no impediment to speed. Tobin had the bow and I the stern, with the Missus in the chair. The Missus comforted me with a warning not to make her lose the fish, and judiciously I kept quiet. I wondered what my proprietary rights were, but I did not utter my thoughts. Three hours and a half later we got back to camp. I humbled in spirit, with sore arms and a well-nigh broken back; Tobin as proud as a peacock, and the Missus as vain as a man. All because Tobin gaffed that salmon!

"And never yet since high in Paradise
O'er the four rivers the first roses blew,
Came purer pleasure unto mortal kind."



JAPANESE MATCHLOCK.

Heavy octagon barrel, 29 inches long, total length 44 inches. Calibre 53, open sights, smooth bore.

THE HOARY MARMOT. *ARCTOMYS CALIGATUS*.

ALLAN BROOKS.

This rodent is known among naturalists by the above name, but hunters, miners and other mountaineers call it by a dozen different names, of which "whistler," "siffleur" and "squay-uck" are the most appropriate. The last is the name it is generally known by among the Indians of the Northwest coast and is derived from one of its call notes.

RECREATION seems to have a great number of woodchuck fiends among its Eastern readers, and hunting woodchucks with a good target rifle is good sport anywhere; but the highest form of this pursuit is hunting this magnificent woodchuck in his native fastnesses.

In the beautiful park country in the region about timber line on the Cascades, Selkirks, Rockies, and Olympics, the squay-uck is the most conspicuous denizen, and his long drawn, shrill whistle is the most characteristic sound heard in the hills.

This animal is warier than the Eastern woodchuck, and much more so than its smaller congener, the rockchuck, or yellow-footed marmot. Hunting them is therefore more fascinating, apart from the grandeur of the country they inhabit.

Their alarm note, heard the instant one

shows one's self on a ridge, or when a golden eagle sweeps over, is a long drawn whistle, whee-e-e-e, and instantly every animal within 200 yards is scampering for his hole. When safe in the mouth of the den, or beneath some great rock, the note changes and becomes shorter, sharper, and of a staccato intensity, especially if the cause for their alarm is an eagle.

Their call note, when not alarmed, is a plaintive cry, "quay-uk," or as the Siwash puts it, squay-uk or sque-uk. A full-grown adult will weigh as much as 25 pounds, and even more, and must be a tough proposition for an eagle to tackle. Siwashes claim the eagle flies up to a considerable height with the animal and drops it on the rocks again and again until it is quite dead.

When sunning themselves these marmots sometimes spread themselves on a rock at full length, and are then hard to detect, if the rock is gray granite. They have great vitality, but if shot through or anywhere forward of the shoulders, are easily killed, even with a small calibre rifle. When shot through the middle they get into their holes, even if the bullet be a .50 express. They hibernate from October 1st to May 1st.



THE HOARY MARMOT. *ARCTOMYS CALIGATUS*.

COMING HOME.

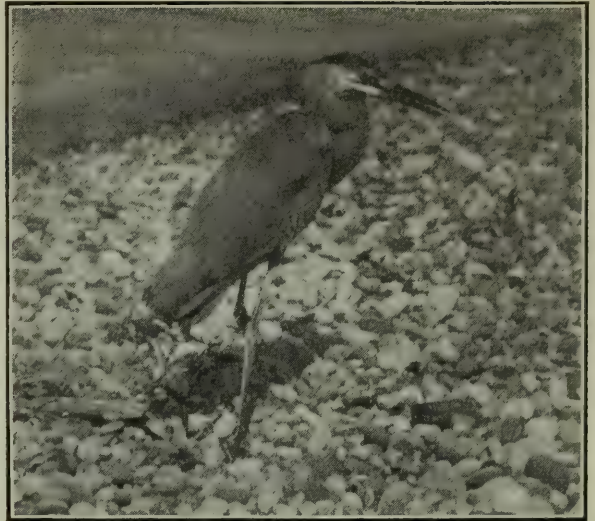
FRANK FARRINGTON.

The hunt is ended, daylight fades,
 The last faint flush has turned to gray,
 And wearily home through the deepening
 shades
 The boat swings into the lower bay.

There's a ribbon of silver far astern,
 The pines cast shadows long and dim,
 There's a murmur low from the whispering
 trees,
 As mothers croon some good-night
 hymn.

On the further shore is a warm red glow,
 And I know the welcome that waits for
 me;

Ah! the joy of living I shall know
 In the night and silence alone with thee.



AMATEUR PHOTO BY G. C. EMBODY

ROUGH WALKING.

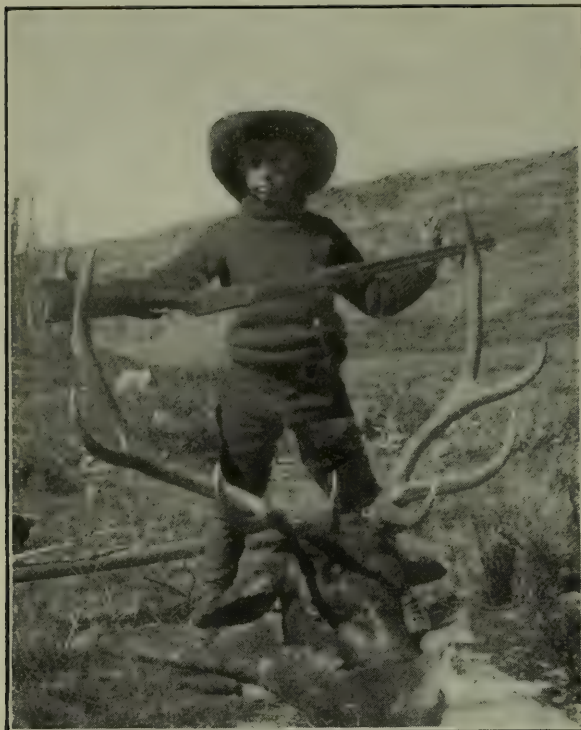
Winner of 47th prize in RECREATION's 4th Annual
 Photo Competition.



AMATEUR PHOTO BY F. E. MATHEWSON

FUTURE DEWEYS.

Winner of 48th prize in RECREATION's 4th Annual Photo Competition,



A 12 YEAR OLD HUNTER AND A 6-POINT HEAD.

I enclose you a photo which I took of my son, 12 years of age, showing him with a 6-point elk head he had just shot and skinned out. He was hunting with a friend and me last fall on the head waters of the Buffalo, Black Rock, and Green rivers, in Northeast Wyoming, and proved himself an enthusiastic and hardworking sportsman. I do not think you have a more interested reader of *RECREATION* anywhere than John, Jr.

John Bancroft, Wilmington, Del.

ITS TAIL WAGGED.

A big buck deer, suspended by his heels in front of a game store on upper Broadway, created much excitement yesterday afternoon. Stiff and stark as he was, he wagged his tail. The man who first saw the tail wag nearly fainted.

"Have I got 'em?" he asked himself, and then he stood open mouthed, watching the tail wag on. A big crowd gathered. In a few minutes the *matinée* reinforced the throng, and Broadway was blocked. It took 2 policemen to clear the sidewalk. Still the deer kept on wagging his tail.

Finally the owner of the animal admitted the trick. He had put a small electric battery inside the deer and attached the wires to its tail.—Cincinnati Enquirer.

She: "It tells here of a man in Chicago who hasn't spoken to his wife in 15 years."

He: "Perhaps he is waiting for a chance."—Life.

LEROUX'S GARCON.

G. W. STEVENS.

We have some pretty dandy time
Way down here hon de bay;
My leetle boy, she's six year old,
Mak' sunshine all de day.

Sometime' we go out hon de boat
An' row up to de store—
He put hes leetle han' on mine
An' tink he pull de oar.

He knows to shoot hes pa's big gun;
I hol' it cross my knee—
He tak' good aim an' let her fly—
Shoot knot hole off de tree.

An' when I go to lumber camp
He write me ever day,
Such funny leetle scrawl—but den
Hes pa know what he say.

One day we fish an' get some bite
He pull an' nevair flinch—
Den I pull, too—we get catfish
Weigh 'leven-pound'—two inch.

Jaggs: "I hear Boggs is studying astronomy."

Naggs: "How can he do that? He's running a cheese factory."

"Well, that's it; he's making studies of the milky whey."

I enclose you a snapshot of myself and partner and the result of 2 days' sport in South Dakota. There are 100 ducks, one jackrabbit and one cottontail. Seventy-nine of these ducks were killed in 3 hours and the balance the next morning.

Arthur Felt,

Ward Sheldon, Mason City, Ia.

And you call it "2 days' sport." Why not "2 days' slaughter?" You doubtless call yourselves "sportsmen," but people who believe in calling a spade a spade will give you a more appropriate name.—EDITOR.



TWO MORE SHOATS.

HOW TO SAVE OUR BIRDS AND MAMMALS.

Speech of the Hon. John F. Lacey, M. C., at the Dinner of the League of American Sportsmen.

Mr. Toastmaster and Gentlemen: I am delighted to meet so many of the lovers of wild American birds, beasts and fishes from so many different States and Territories here to-night. The attempt to preserve any of our native resources of this character comes very late, but I hope not too late. It is proposed to lock the stable door before the horses are all stolen. During my own service in Congress it has been my fortune, on the Committee on Public Lands, to do what I could to aid in the saving of our remaining forests from utter destruction, and the good work done in that line is already bearing fruit. Let the forests be wholly destroyed and the climate becomes entirely changed. The streams dry up, and agriculture, the foundation of all our wealth, suffers irreparable injury. The streams are the children of the forests, and the fish are the children of the streams. In my childhood the brooks of my native State, West Virginia, and her sister State, Ohio, were full of pools, and the hillsides gushed with living springs. The forests have been destroyed and all this is changed. Dr. English sounded his protest as early as 1842, when he wrote of "The shady nook by the running brook
Where the children went to swim;
Grass grows on the master's grave, Ben Bolt,

But the spring of the brook is dry."

The deadly hand of man is committing the same crime in the far West. On my first visit to Oregon 13 years ago I got off the cars at The Dalles to take the boat down the Columbia. As I walked out on the pier someone shouted to me with great excitement:

"Run this way quick and you will see Mt. Hood!" I said laughingly,

"There is no danger of the mountain running away, is there?" and the answer came.

"Come quick, if you want to see it."

I ran out, and there in the clear light stood the beautiful, snowy peak. I watched it for probably 30 seconds, when the cloud of smoke rolled back over it again, obscuring it from view, and that was the first, last and only time I ever saw Mt. Hood. Last summer I revisited the same locality and did not even get a half-minute glimpse of the mountain. The region was clouded with the smoke of the burning forests, just as it had been on my first visit in 1887.

With fire and axe the destroyer has been doing his work. A splendid tree, 300 years

old, is attacked with auger and coal oil and swept from the face of the earth for the "improvement" of the country; a tree that took from 300 to 500 years to grow, and which in a few years would be worth as much as 40 acres of land, has been destroyed in a day's time.

Along the banks of the Columbia fish wheels have been planted, and the salmon packers are diligently engaged in the extermination of those beautiful fish. No adequate recognition of the necessity for permitting a sufficient number to escape seems to exist, but the fish is treated as a common enemy rather than as a friend. Such destruction of our natural resources has but one end on the Pacific coast, as it has had on the Atlantic.

Terrapin were once so plentiful in Maryland that a law was passed prohibiting masters from feeding their slaves on this succulent reptile more than twice a week.

In Connecticut the avaricious master fed his apprentice so freely on salmon that a law was passed forbidding too much of a fish diet for those unfortunate boys. Now, with terrapin worth \$5 apiece, and salmon at 75 cents a pound, there is no danger of the excessive use of these articles of diet, unless it be among the millionaires. And so it is with all our other natural resources. At Delphi natural gas was worshipped by the Greeks 2,300 years ago. Now it is harnessed and set to work in the gas fields of the United States, but a reckless disregard for its preservation has been shown in every field, and it is only a question of comparatively a short time until the gas and the coal oil will take their places in history, along with the buffalo, the wild pigeon, the terrapin and the salmon.

The presence of this assembly to-night indicates that the conscience of the American people has been quickened on these questions. The hunters and the fishermen begin to join hands in the preservation of the inhabitants of the forests, the air and the streams.

St. Paul was the persecutor and destroyer of the saints, but he saw a great light, and spent his after life in their defense. The birds and the beasts appeal to the sportsmen who have persecuted them in the past and have not appealed in vain. I am talking to gentlemen who may have been "game hogs" or "fish hogs" in their early youth. Every true sportsman outgrows this mania for indiscriminate slaughter. No doubt some gentleman here has

had himself photographed in the past, standing by the side of a great string of fish or by a reeking holocaust of game. A pot hunter now might have his picture thus taken, but a sportsman, in these days of scarcity, would be ashamed to do so.

I plead guilty to having, in my youth, taken part in the brutal pastime known as the "side hunt," where 2 parties start out in the remorseless competition of destroying as much animal life as possible; a rabbit counting so many points, a prairie chicken so many, a bluejay, blackbird, crow and other birds all being scheduled at a given number of points. A hunt like this at the evening round-up shows a sickening aggregation of unnecessary and unsportsmanlike slaughter. The sportsman who would enforce the laws must obey them himself and set a proper example to the rising generation.

I heard the other day of a dealer in bogus butter, who, having been sentenced to fine and imprisonment for his offense, remarked, on retiring from the court room, that he would not have minded his punishment so much, but he disliked to be fined for selling bogus butter by a judge who wore dyed whiskers.

In 1870 I crossed the plains when the buffalo could be counted by the thousands. A recent Indian massacre had occurred in Colorado, and I was shown the fresh graves of a dozen men by the roadside. When the night came on and the stage driver lit the lamps of our coach, so as to make an especially good target for a hostile arrow, or bullet, considerable of the enjoyment of the trip was taken away; but I forget readily the discomfort of that part of my journey, and remember with pleasure the herds of buffalo, elk and antelope that enlivened the scene.

To-day I estimate the number of living buffaloes at 400. Prof. W. T. Hornaday, who is present, told me a few minutes ago that his estimate was 600, and I would not, for a moment, offer my judgment in contradiction to such eminent authority on this question. Thirty years ago a difference of 200 in the estimate of a number of living buffaloes would have been too small a matter for consideration, as that would only be about enough to occupy some industrious and enterprising killer 2 or 3 days; but to-day there are nearly as many millionaires in this city as there are buffaloes in the whole world. The natural suggestion is that we are getting long on millionaires and short on buffaloes.

The annihilation of the noblest of all the American mammals is one of the crimes of the 19th century. It took millions of years to evolve and produce this splendid animal. He was especially adapted to the hard life on the arid plains

of the West. The cattle of the present day turn their tails to the wind and drift hopelessly and helplessly with the course of the blizzard. The buffalo turned his head to the storm and fought it out with nature, triumphing over the wind and the cold for ages upon ages, finally succumbing only to the breechloader and the butcher knife of the skin hunter of the latter end of the 19th century.

But you invited me especially to explain the nature and scope of a bill introduced by me in the House of Representatives, to give national assistance to the preservation of what remains of our birds and beasts. All States and Territories have enacted laws in accordance with the present enlightened public sentiment in this direction. These laws have been nullified by the pot hunter, who kills and traps the birds and beasts for food for Eastern markets, or who destroys the insectivorous and the song birds for the milliner. It seems strange that from the beautiful hat of the tender hearted woman the mummified bird of song should look appealingly, with its glass eyes, to the more tender heart of the American sportsman for protection. Appeals to the women by the Audubon societies thus far have been in vain. When on the streets I meet young girls and matrons with their kindly faces, and see the aigrettes in their bonnets and hats, I can not help feeling that these daughters of Eve do not know how these feathers were obtained. These plumes only grow while the bird is rearing its young, and I believe if most of the women who wear them knew they were obtained by shooting the mother on her nest they would be ashamed to keep them, even in secret, much less to display them on the public streets.

The bill (H. R. 6,634) to which I direct your attention gives the Secretary of Agriculture power to introduce useful wild birds of all kinds into localities where they have become extinct, or in localities where they have heretofore existed, but it gives him power to prevent the introduction of injurious foreign varieties of birds and beasts.

Some time ago a gentleman conversing with me on the subject of the English sparrow, which has earned and deserves the reputation of being a common nuisance, called my attention to the danger of introducing other birds of evil reputation, and suggested to me that we ought by all means to prevent the importation of the flying fox or the mongoose. He evidently regarded both of them as *birds* of bad repute. In this appeal I have recognized that these animals were vermin and ought to be excluded. The main feature of the bill, and the one which will be found the most useful, is that which prohibits interstate com-

merce in wild birds and animals killed or captured in violation of local laws. At present the State laws are rendered almost entirely useless, owing to the fact that the poacher kills or traps the game and ships it to a distant market in packages so disguised that neither carrier nor local game protectors are able to detect the contents. When these shipments arrive at the market they are of no value unless exposed for sale, and as soon as exposed, if shipped in violation of the laws of the States, they can readily be the subject of prosecution by the authorities charged with the enforcement of the laws. This additional power in the hands of men engaged in the protection of our birds and beasts will, in my opinion, do more to stop this nefarious traffic than any method that has yet been devised.

The farmers of the country who are interested in the preservation of their feathered friends will all favor such a measure. Concerted action all along the line, by the lovers of our birds, will insure the passage of this bill.

As to the introduction of locally extinct

species, or new species, through the Department of Agriculture, I can only express my belief. We know that when a game club introduces birds they are ruthlessly destroyed by persons having no interest in their preservation. The newcomers are looked on as being imported for the recreation of a wealthy gun club, and therefore a proper subject of destruction. I hope and believe that a different sentiment will be shown when such birds are looked on as the subjects of national concern. Every boy and man will feel that these strangers are the property of the nation at large, and that everyone should take an interest in seeing that they are suitably protected until such time as they may be abundant enough to be the objects of occasional pursuit. Above all, the protection of our remaining natural resources must be the subject of an enlightened public sentiment. Meetings like this to-night are the starting point from which such sentiment may proceed, and I am sure the results of this annual meeting of the League of American Sportsmen will be seen and felt in all the years to come.

WHO SAID SKUNKS?

RAMSAY MACNAUGHTON.

Ever since my article on "Skunk Farming for Profit" appeared in *RECREATION* I have been bombarded with letters from all parts of the country, asking for further information on this subject, and I therefore send you these additional notes.

Skunk farming, while a new idea to the majority of readers, has long been known to quite a number. The subject is frequently discussed in the large wholesale fur houses in New York City. And, by the way, live lists of some of the big fur houses show that over 15,000 persons are engaged in hunting, trapping and collecting furs in the United States and Canada. Where population is densest and fur-bearing animals least expected, they are often found. For instance, a large number of trappers are found in New Jersey. It is from this goodly army of trappers, the fur merchant, and works on zoology that the would-be skunk farmer must get some of his facts.

Within a few years I have known of 8 or 9 successful skunk farms in Pennsylvania, and upward of 100 scattered throughout the United States. Many men engaged in raising skunks have called on me from time to time. They invariably compared their skunks to cats and kittens or barnyard fowls. As with any other pursuit,

those having taste and talent will find nothing in the occupation to object to, much to admire, and a substantial net profit. Naturally many questions have arisen from the article on "Skunk Farming for Profit," many of them sensible and reasonable enough, others that are not answerable here.

The questions of freight, expressage, or method of shipment can best be answered at nearest railroad station. The ever-willing postmaster of remote little country places will reply on enclosed postal card, telling who in his neighborhood invites correspondence regarding such skunks as are wanted to stock up with. Almost any farmer's boy can tell the tastes and habits of skunks, and that information is a complete key to raising them successfully in confinement. For those who want to go deeper, a course of reading in natural history will be valuable.

Skunks are not quarrelsome, and only hunger, neglect or discomfort will make them so. Like any domestic stock, their tranquillity and good nature indicate that they are thriving. They are no more inclined to bite than cats are, and the timid can wear stout buckskin gloves when handling them, as is the practice in taming gray squirrels or other

small fry that bite viciously. There is no known case of skunks having rabies, and it is highly improbable they ever have anything worse than a harmless fit. If a bite was ever serious it was through the skunk having eaten some poison, which in turn entered the bite, an experience possible with any of our perfectly safe domestic animals.

In their free state skunks have 2 litters annually, of 3 to 5 each; but in confinement, if suitably housed and sure of feed, could be induced to have several, whenever planned by the raiser. One male to 15 of the gentler sex would be about right; but, again referring to domestic stock raising, all the same principles are applicable. If the skunks are to be yarded small bands of 16, with one male, do best. When actually breeding, it is well to have a double supply of males, keeping half fresh in individual pens and alternating them with those in use. If the method is to let them run riot among a lot of tumble-down buildings that have been enclosed, then one male to about 30 females has proved best, alternating them with fresh ones, according to the observations of the raiser. When the males show a tendency to mo-

nogamy they should be changed about frequently; if they show less discrimination, then not so often.

Skunks should be bred to skin in January and February, as then the fur attains its perfect condition. Sometimes the fur is perfect from the 1st of December, but more often prior to January it is hairy rather than furry, and lacks its exquisite, sleek gloss and silkiness. After February it rapidly becomes rusty in color and woolly. The skunk is invariably subject to this change wherever his new home is or former habitation may have been. He will not, however, deteriorate or change otherwise one particle in confinement; and could only acquire the inferior characteristics of the local skunk through being allowed to again go free and become wild. Even then it would require 3 or 4 generations to acquire the local qualities; and the good qualities brought from elsewhere would also be in marked evidence, as in all breeding stock.

I admit myself stumped on the question of how many males and females may be relied on to a litter. I pass it on to the next. Any other question I challenge and will gladly answer.

HONOR TO WHOM HONOR IS DUE.

ARTHUR F. RICE.

There are many out-of-the-way places in the Adirondacks where the game laws are violated with comparative impunity because of their remoteness, the inefficiency of game wardens, the temptation to procure meat for the lumber camps, and the notion of some permanent residents that the game laws are an infringement of their private rights. All these things conspire to make the killing of deer out of season, or in excess of the legal quota, more common than is generally believed.

It is the mission of the League of American Sportsmen to ferret out and convict these violators of the law; but it is also the pleasant duty of the League to put on record those who steadfastly adhere to the laws, and, without apparent regard to self-interest, refrain from breaking them themselves or allowing others to do so where they can prevent it. Such a man is Clarence A. McArthur, proprietor of the hotel known as "McCollom's," 10 miles Northwest of Paul Smith's. McCollom's used to be a famous place for hounding, and when that form of sport came within the limits of the law, big parties used to go there in the fall with every probability of a successful hunt. When hounding be-

came illegal, McArthur stopped it himself, and compelled every one else to stop it at McCollom's, although it is morally certain that many of these parties went elsewhere where the laws were not so strictly enforced—to Lake Placid, for example, where, if numerous well-authenticated reports can be believed, hounding has been going on during the past season, and certain hotel proprietors and others who pose as advocates of game protection have been among the most flagrant violators of the law. They will hear from the L. A. S. a little later.

But now mark the results. The hunters went away from McCollom's, but the deer did not; and while other sections were being depleted by illegal killing and the deer were driven out by dogs, they found a sanctuary in McArthur's preserve, and flourished and multiplied, until, now, he has one of the best still-hunting territories in the Adirondacks. I understand that in the Lake Placid region and other similar lawless sections it is becoming difficult for a man to get a deer by still-hunting. At McCollom's, judging from the number I saw there last season, he must be a poor shot or in exceedingly bad luck who can-

not bring in his deer as a result of honest still-hunting. Up to the 15th of August no one saw or tasted venison at McCollom's; but thereafter and until the close of the season it was a constant element of the bill of fare. What more could reasonable guests desire?

I have just received a letter from my old guide, Will Martin, who has been trapping in that section this winter, and he says he never saw so many deer and deer signs before in any part of the Adirondacks. McCollom's is an ideal place for the sportsman and his family, with its well-appointed hotel, its glorious scenery, its picturesque log camps, and its excellent fishing in the lakes and streams near by.

The point I wish to make, however, is that where the law is observed, there you can

find the deer. Where it is violated, there you may be sure they will become scarce; and the market hunter, the game hog and the lawless hotel proprietor will in the end suffer the penalty of their own wrongdoing. The sportsmen and their dollars will go where the game is. Certainly every member of the League of American Sportsmen should speak a good word for the sturdy upholders of the law among the hotel men of the Adirondacks, and give them the preference over the short-sighted and lawless men who by killing more deer than they are entitled to and serving venison out of season, are hastening the day when they will not be able to serve it at all, and when the man who wishes to shoot a deer will have to go to Maine or Canada to accomplish his object.

HOW IT LOOKS FROM THE ROAD.

A. L. VERMILYA.

Search the woods and rake the meadows
For a robin, owl or bat;
Something that when slain and mounted
May adorn my lady's hat.

Rip the feathers off the songsters,
Take each head, and tail, and wing,
For them is my lady waiting,
Tender-hearted, gracious thing.

See her sitting in her carriage
Making all the show she can;
On her head a cemetery,
In her hand a feather fan.

Yet she talks of love and mercy
To all things, in honeyed words,
While she's decked in borrowed plumage
Torn from slaughtered singing birds.

O, Consistency! thou jewel,
Teach these women common sense;
Teach them, while they prate of kindness,
They themselves give rank offense.

TWO CASES OF RIFLE SHOOTING.

L. STEELE.

A clear morning in December, thermometer 14° below zero, altitude 6,800 feet.

I found myself thus situated at a sheep camp 25 miles South of Manville, Wyo.

Immediately after breakfast I started, in company with Mr. A. Remington, to look up a bunch of antelope. I carried a '94 model nickel steel Winchester .30-30; he a Winchester, same model, .38-55 carbine. We sighted the band, about 50 of them, before 9 o'clock, but they were so wild and the country so open and flat that at 4 p.m. we had not had a shot, and had concluded to return to camp at once.

Not willing to go in without burning some powder I began firing at the bunch. The air was the clearest I ever saw it at that altitude, yet I knew they were a very long distance away. Mr. Remington fairly hooted at the idea of shooting at anything at such a distance, declaring it was a mile to the animals. At the fourth discharge a fine buck suddenly quit the bunch, ran off to the right, about 200 yards, and lay down. At the seventh shot another animal staggered off to the left about 100 yards and fell dead.

Not having bristles on my back I considered 2 antelope quite enough. As we rode toward our meat the band ran away.

When we started from the spot where the shooting was done we saw a section corner stake (the country had been recently surveyed by the Government) about 30 yards in front of us and as the band was about due East of us the idea suggested itself of observing the line stakes and thus getting the actual distance.

Riding forward we found the next section corner in a line beyond where the band had stood, a distance of 100 yards. I had killed 2 antelope at a distance of over 1,600 yards!

I had always had faith in the shooting qualities of my .30 but my experience that day changed my sentiments to genuine admiration.

A few days ago I was on the edge of the Laramie plains, shooting sage chickens with a .22 rifle, long cartridge.

Two ladies in our party having desired the plumage of some old male birds, I was looking for an opportunity to gratify their wish. So when I sighted a dozen or so old cocks, large as small turkeys, I walked toward them trying to get a shot. As they were somewhat wild I opened at long range. Just as I pulled the trigger, on one of the largest, I noticed another bird directly in range beyond the first. As the smoke blew away I was surprised to see both birds fluttering on the ground. Pacing the distance to the first one I found it to be 215 steps. As I step about 2 feet, the distance to the first was at least 130 yards. The ball had gone through his shoulder and neck, dislocating the latter. The other bird was about 5 or 6 yards beyond the first. The ball had torn its way through his body, riddling his heart on its way.

In the first case my friend, with his .38-55 did not get a shot, though I gave him plenty of chances, for I wanted to see him get a trophy. In the second instance a shot gun under most favorable circumstances could not have done the execution.

THE BEST DAY OF THE YEAR.

G. A. WARBURTON.

The day of all the glad year
Which I love best;
The one I think the most of,
More than all the rest.
The one whose coming brightens
My face, and makes it shine,
Is the early day in April
When I first cast a line!

You may talk about your Christmas,
(And I'll join in praise of that)
You may welcome blooming Easter,
With its myriads of big new hats;
You may rave about the birthdays
Of the men who did their best:
But give me the first day's fishing
And you may have the rest.

I've been waiting long, since August,
For this balmy April day;
I've dreamed about it many a night,
And thought of it by day;
Patriotic and religious moods
Have been colored by the wish:
That the wheels of time would hurry
With the first day to fish.

FROM THE GAME FIELDS.

IN DEFENSE OF DOCTOR HARRISON.

I have read the article in RECREATION attacking Dr. George E. Harrison and am glad of an opportunity of expressing an opinion which may tend to clear him from the accusations made against him. My brother and I made an extended canoe trip on the Big Fork river, in Itasca county, Minn. We were without a guide, were unacquainted with the country, and on making inquiries among the settlers were recommended to call on Dr. Harrison. Although unknown to him, we were received in a most courteous and hospitable manner at his camp. At his invitation we pitched our tent near his lodge and remained there about a week, spending the time hunting and fishing with the Doctor; and I have never met a truer sportsman than he.

I have never known of his killing more game than was required for food. If every so-called sportsman were as true a gentleman and sportsman as Dr. Harrison is there would be no necessity for game laws.

Edwin H. Steedman, St. Louis, Mo.

I take pleasure in endorsing all my brother has said.

George T. Steedman.

In August, '99, I visited Minnesota and by pure accident found myself about dusk one evening at Dr. Harrison's camp. He invited me and my friend to spend the night with him, and after that insisted on our remaining with him during our stay in the State.

From the knowledge I have of him and his surroundings I consider any story which has been circulated about his slaughtering game a falsehood. I found Dr. Harrison more of a student and writer than a lover of killing game. He is a positive man and one whom I imagine has made enemies in his neighborhood; but in 2 weeks' paddling through Itasca county he is the only true gentleman sportsman I found.

George A. Keeler, Indianapolis, Ind.

I visited Dr. Harrison's camp in the fall of 1897, and it has never been my pleasure to meet a more charming man or a more ardent lover of sport and recreation in its higher form than Dr. Harrison. Never have I met any sportsman who would, in my opinion, do more than he toward the increase and maintenance of big game around his camp.

I have heard him express his opinion many times against the slaughter of game, and have heard him say he would never

kill or allow to be killed any game that could not be used. I have never seen him kill game of any kind out of season, and I have never heard any man say he had seen him do so.

R. L. Ettenger, Indianapolis, Ind.

I visited Dr. George E. Harrison's camp last year, but from the fact that I was there in midsummer had no opportunity to judge of Dr. Harrison's bearing as a sportsman.

From what he has said on the subject, at various times in camp, I should think he would be the last man to do anything that would lessen the abundance of game in the Northwest.

Chas. S. Millard, Indianapolis, Ind.

I have no knowledge of Doctor Harrison as a sportsman, but from what I know of him I should not expect him to be a party to the slaughtering of game.

Chas. S. Fee, St. Paul, Minn.

I learn that Dr. George E. Harrison has been accused of slaughtering game in Itasca county, Minn., and I write to say he does not do so. He is a citizen of this county, has a claim of 160 acres with a house on it, and I live within 3 miles of him. He is a gentleman in every sense of the word. Even when hunting ducks Dr. Harrison does not shoot them on the water, but shoots them altogether on the wing.

I am sorry that any such report should have reached you, and am sure the man who thus accuses Mr. Harrison does not know him.

I will have 2 men sign this who are also neighbors of his.

E. O. Walley,

Noah Fletcher,

Wm. J. Quigg.

Deer River, Minn.

SEND IN YOUR SUGGESTIONS.

I have been a reader of RECREATION the past 3 years, and, like others, think it the best magazine published, for the money. There is one subject, however, I have never seen discussed in its pages, and one which I should think ought to be, as it would probably give much information to parties who intend to go on hunting trips. That is, camping and camp cooking. I do not refer to people who go from the city abundantly provided with canned goods, bedding, gasoline stove, a barrel of gasoline, with 2 or 3 cooks, and other servants. I do not call that camping out. I call that a general moving. What I

have reference to is, say, 2 men going for a 2 weeks' shooting trip, and having to carry all their outfit, including provisions, guns and ammunition necessary for that time, and having to tramp 5 or 10 miles to get to the hunting grounds. I should like to know what they would take along, and how they would prepare their provisions after getting into camp. I think this ought to open up a department in your magazine that would afford opportunity for interesting discussion among sportsmen. I should like to hear different views on the subject.

F. E. Wilson, La Salle, N. Y.

ANSWER.

The suggestion is a good one. Many brief items have been published in *RECREATION* from time to time on this topic, but no general discussion of the subject has been attempted.

Here is a list which I prepared some years ago, and which will bear careful study.

SUPPLIES FOR 2 MEN FOR A TEN-DAYS' TRIP ON FOOT.

- 10 pounds hard bread.
- 14 pounds bacon.
- 3 pounds dried apples or peaches.
- 2 pounds salt.
- 3 pounds sugar.
- 2 pounds coffee, roasted and ground, or
- $\frac{1}{2}$ pound tea.
- 1 sleeping bag, or blankets.
- 2 rifles or guns.
- 100 cartridges.
- 2 fishing rods.
- 2 reels.
- Hooks, lines, flies, reels, etc.
- 2 belts and hunting knives.
- 2 pocket knives.
- 1 tent.
- 2 pack straps.
- 1 ax,
- 2 suits extra underwear, in bags.
- 4 pairs socks.
- 2 rubber coats.
- 2 compasses.
- 2 watches.
- 1 camp kettle.
- 1 frying pan.
- 1 wire broiler.
- 1 stew pan.
- 1 coffee pot.
- 2 tin plates.
- 2 spoons.
- 2 tin cups.
- 1 dish cloth.
- 2 pounds tobacco.
- 2 pipes.
- 1 map.
- 300 matches.
- 2 water-proof match boxes.
- 2 ounces insect lotion.
- 2 cakes soap,
- 2 towels.
- 2 tooth brushes.
- Supply of small change.

Total weight about 90 pounds.

It is possible to curtail this list slightly, but not without some sacrifice of comfort.

I also published 2 other lists at the same time, intended for larger parties and for longer trips, where transportation was more liberally provided for.

I should be glad to have brief articles

on this subject, from practical campers of long experience, and especially a series of recipes for cooking plain, simple meals in camp, as well as for the preparation of more liberal bills of fare where conditions permit.

Many parties of 5 or 10 people who go into the woods or the mountains do not take a cook. In such cases the members of the party usually take turns at the frying pan and the coffee pot, and in such cases a dozen or 20 formulas for cooking plain, everyday food, and a few for the preparation of knickknacks would be useful. Who will furnish a series of these for *RECREATION*?—EDITOR.

GO TO THE SEVEN DEVILS.

Cuprum, Idaho.

Editor *RECREATION*:

I wish to call the attention of those who contemplate going West to seek new homes to the opportunities offered at the new copper mining camps in the Seven Devils mountains. There are vast deposits of copper here, and mining will begin at once on completion of the Pacific & Idaho Northern Railway, now in course of construction from Weiser, Idaho, to this point, 103 miles North.

This is in the heart of a vast mountainous wilderness, where large game abounds and where the streams are alive with trout. On the Snake river side, a few miles to the West, there are numerous herds of bighorn sheep. A friend who has just returned from there told me it was an everyday occurrence to see bands of 2 to 20. They killed one with a 6 shooter, and could have secured several more had they needed the meat.

At present this place and Bear, the other copper mining camp, are reached by stage in 2 days from Weiser on the Oregon Short Line Railway. I have no doubt that 2 years hence will see this one of the greatest copper mining camps in America, and it will also be a red hot business town.

At the head of Council valley is the finest group of hot springs I have ever seen. They are among the pine-clad hills, where the summers are cool and pleasant, and will be a bonanza for some competent hotel man. They are of undoubted medicinal value, particularly in rheumatic cases, as I can testify.

For sportsmen who desire to settle in a game section where there is every chance to make money in a legitimate way Seven Devils offers more encouragement than any place I know of. Weiser is only 2 days' ride from Omaha, via Union Pacific Railway. I am not personally interested here and have no object in booming the

place; but to brother sportsmen of the L. A. S. who want a home where game and trout are plenty I say welcome.

M. W. Miner.

HE REPLIES TO BORTREE.

Chicago, Ill.

Editor RECREATION:

My attention has been called to an article in your January number, signed M. R. Bortree. Of itself it does not merit attention; but, as you have seen fit to endorse it, I will devote a little time to the man for whom you stand as sponsor. Some years ago he was game warden of the State of Illinois. At that time game was much more abundant than it was when I was appointed to that office, and the Chicago market was flooded with game, from Illinois and elsewhere, at all seasons of the year. Hotels and restaurants served it throughout the entire year; yet Mr. Bortree did not seem to know anything about it. He did not take kindly to my appointment to the position and has not yet become reconciled to it. He has been a constant kicker, finding nothing to approve in anything I have done; yet there has not been a month between August and May during any year of my term of office that I have not instituted more prosecutions for violations of our game laws than Mr. Bortree did during his entire term. I have traveled the State from end to end, in all directions, in an effort to protect our game and to render assistance to my 300 deputies. Had Mr. Bortree been as active in protecting our game as he is in criticising me I should have found more game to protect when I assumed the duties of the office.

Mr. Bortree has never rendered me the slightest assistance since I have been in office; but has been somewhat detrimental to the cause of game protection by the agitation of nonsensical theories, of which he has quite a stock. The smallest express company doing business in this State has rendered me more assistance than Mr. Bortree has. In fact, all of the express companies have rendered me valuable and timely aid.

I have been enforcing the same law that was in effect when Mr. Bortree was game warden. At that time game from other States could be received and sold in our cities and villages between October 1st and February 1st, as at the present time.

H. W. Loveday.

State Game Commissioner.

OBJECTS TO THE SLAUGHTER ORGAN.

I have been a regular reader of RECREATION over 2 years. You are doing a noble work. Long may you live to keep at it. I hold a position on a paper in which I never see a word in defense of

game, as our editorial force consists of men who have no thoughts in regard to fur, fin or feather. Long ago RECREATION taught me the crime of slaughtering game, and I have done my best to impress the enormity of the offense on others. This winter we are feeling the effects of slaughter. Once anyone could secure a fine bag of ducks, geese, snipe, etc., in this vicinity. Now we are lucky to get half a dozen birds in a day's hunt. I have been out twice this winter, and got one duck each trip.

But what caused me to write this is an alleged sportsmen's paper printed in Denver. I am not a subscriber to it, and never shall be. It is the most despicable sheet I ever saw. If a hog goes out and makes a slaughter, he sends his score to this so-called sportsmen's paper. They pat him on the back and say, "Do it some more." A man you roasted, who lives on Puget Sound, writes for their January number, and, of course, gives you an indirect shot. He is too cowardly to send his rot to RECREATION. Then a man named Whalley, of Portland, Ore., a judge on the Circuit bench, who is also addicted to the slaughter habit, gives RECREATION a dig. He says he is afraid to give his score for fear of RECREATION. His effusion also appears in this Denver dump cart. There are others. All, or nearly all, of them are members of the Slaughter Club.

I have done some missionary work here among the boys, and will continue to do so as long as you fight game hogs. Our winter has been rainy, so we look forward to a dry spring, with a fine crop of Denney pheasants. Come out and we will show you where they grow thick.

F. L. Poindexter, Eugene, Ore.

DOES NOT KNOW WHAT HE IS.

I have just returned from a 2 weeks' canoe trip through Lady Evelyn, Diamond and Tamagamaming lakes, with a party of 5 gentlemen. These lakes have never before been fished except by a few Indians. They contain lake trout weighing as much as 35 pounds, black bass and pickerel. We could catch as many fish in 10 minutes with the troll as the party of 10 could eat in a day. We saw a number of moose on the trip, but did not fire at them. We paddled our canoes to within 40 yards of a big bull and a cow moose, and 2 of the party took snapshots at them with their cameras. Up here we do not observe the game laws closely. We do not wait for the open season, but kill when the game is good to eat. The law permits hunting only from the first until the 15th of November, and only 2 red deer can be taken by one person. No moose or caribou may be killed until 1900. They

do not enforce those laws very strictly, or I should be in trouble quite often; yet I do not class myself a game hog.

W. S. Herron, Haileyburg, Ontario.

Law-abiding sportsmen will not endorse your good opinion of yourself. By your own confession you have been robbing the people of Canada of game they are trying to protect and increase for the future good of all. If you continue the practice, I trust you may meet trouble in plenty.—EDITOR.

A GOOD WARDEN IN MICHIGAN.

Game Warden Morse, of Michigan, says in his monthly report that the work of his department in December was more active and effective than was anticipated. Few violations of the fish laws were reported. Violations of the game laws increased, mostly from attempts of market hunters to ship game out of the State. Many market hunters, however, were arrested and convicted, or have cases pending against them. During the month 168 cases were investigated, and 114 suits prosecuted, 78 being for violation of the game law and 36 of the fish law. Convictions resulted in 50 cases. There were 4 acquittals and 12 dismissals; 48 cases being still in the courts. The sum of \$622.30 was assessed in fines. Fish, game and fishing apparatus valued at \$436.49 was confiscated. "Reports from nearly every county in the State," says the warden, "confirm my statement made in November, that we have more game in store than we had a year ago." This, coupled with a steadily growing sentiment for game protection, makes the future look brighter for our sportsmen. The hunters who went from here to the upper peninsula last fall did not average over one deer each. A few got their 5 deer. Game was plentiful, but as there was no snow it was difficult to find it. Ed. Blossom, Otsego, Mich.

THE RIGHT KIND OF SIDE HUNT.

Enclosed please find a clipping from the Cleveland Press:

Upper Sandusky, O., Jan. 2.—A sparrow shoot took place in this city Jan. 1, 12 men on a side, and resulted in a victory for the side captained by County Surveyor A. F. Schoenberger. Over 1,300 birds were killed. The losers, captained by County Recorder A. have the winners a banquet.

Is it right to kill such harmless birds? Even the sparrows do some good. If you think they should not have done this give them a good roast in RECREATION. If not, let the matter drop; but I think it is wrong and that these men should be in with the swine.

Subscriber, Akron, Ohio.

ANSWER.

The English sparrow is an unmitigated pest, as has been frequently shown in RECREATION, and any man who kills one is doing the country a service. Any party of men who kill 1,300 of these birds is entitled to the gratitude of every lover of our native American song birds. I wish all the gun clubs in the country might hold weekly side hunts on sparrows. It would be much more manly and sportsmanlike than to shoot tame pigeons from traps.—EDITOR.

THE CHAUTAUQUA BUTCHERS ARE AT IT AGAIN.

Later and more complete reports from the fishing operations on the lake Thursday, the second day of the 1900 spearing season, show that the catch was very light. As far as learned, the largest fish brought in did not weigh over 15 or 20 pounds, and there were not many that large. Even the smaller ones, weighing from one to 5 pounds each were few in number.

In Dewittville bay, one of the best fishing points on the lake, only 15 fish were taken, the largest one having been speared by Samuel Case. It weighed 19 pounds. C. E. Hawley secured one that weighed 16 1-2 pounds, S. T. Scofield one of 6 1-2 pounds, Harry Arnold one 7 1-2 pounds, Orville Casselman one weighing 11 pounds and Reuben McCaul 2, the largest 5 1-2 pounds.

From all parts of the lake the water was reported as quite roily and in many places the swollen streams overflowed the ice, making the conditions anything but agreeable for spearing.—Jamestown, N.Y., paper.

Thus it appears the men who murder muscalonge with spears are rapidly finishing their occupation. When they get the few remaining big fish out of Chautauqua lake they will have a chance to spend their winter days sitting around in the saloons and groceries of Jamestown, spitting tobacco juice at cracks in the floor, and telling what great fun they used to have before the summer visitors spoiled the fishing in the lake.—EDITOR.

DEFENDS HIS CLUB.

In January RECREATION I noticed an article signed B. J. Shaver, West Superior, Wis. This man has accused every member of the Lake Superior Gun Club with slaughtering deer all the year round. Now, the fact is nearly every member of that club is individually interested in the better protection of game, and through their efforts much good work has been done in the Northern part of Wisconsin, although there is still plenty of game being killed out of season. In regard to the shooting of the snipe he wrote about; it occurred on the 27th of August last. We were trap shooting. A squad was at the score. A flock went past. Three of us took a shot at them. Not many fell, but what did were taken home and not left where they fell, as stated by Mr. Shaver. I have learned since that it was the closed season on those birds, so of course it was wrong to shoot them; but as Mr. Babcock

of California, says, "My conscience is not troubling me any now."

A. W. Laud, Duluth, Minn.

GAME NOTES.

Oregon is waking up, or at least her game warden is. I enclose a clipping from the Oregonian that will make you feel good or I am mistaken.

Ole Oleson, of West Fork, while bringing a large number of deer hides to Roseburg to sell last Wednesday, was apprehended by our game warden and the skins were confiscated. On Thursday Oleson was given a jury trial in Justice Miller's court, was convicted of unlawfully transporting deer hides, and fined \$300 and costs, in default of which he was committed to jail. L. Deach, proprietor of the Roseburg tannery, was also tried Thursday afternoon on a charge of unlawfully handling deer skins and converting them into merchandise, and was found guilty as charged. He was fined \$100, which was promptly paid. Oleson's brother has also been arrested on a charge of unlawfully handling deer hides, but has not yet been convicted.

J. W. T., Portland, Ore.

There is a lot of truth in what you say, but from time immemorial the hog has been the synonym for everything that was greedy, selfish and indecent. Hence, he seems to typify the nature of the Webbers better than even Webber himself could ever do.—EDITOR.

RECREATION has become, beyond doubt, the best sportsmen's magazine published, regardless of price. Your constant and persistent warfare on the game hog is creating throughout the West a healthy public sentiment.

This is the grandest country in the world for quails. Cover is plentiful everywhere, the winters are mild, and the breeding season free from killing storms of rain. Our last Legislature made it possible for persons in the Territory to kill quails for the local market, and the result has been disastrous. Thousands of quails are on the market everywhere, and they sell for 75 cents to \$1 a dozen. None can be shipped out of the Territory under the law, but it has been done, and some convictions have followed. Our next Legislature should prevent the selling of game.

A. R. Fuseller, Perry, Oklahoma.

I should like to know what you consider a reasonable bag of quails and rabbits for one day's hunt.

Charles Zombro, Marion, Ind.

ANSWER.

I consider 10 quails a fair bag for one day, and no man should kill more than 50 in any one season. As to rabbits, it is impossible to make a rule to fit all cases. In many places they are so numerous as to be a pest to farmers and fruit growers. In such cases it is necessary to kill them

off as rapidly as possible, and there can be practically no limit to the number one man may kill in a day. In districts where rabbits are scarce and where they are not doing any material damage to farm property, then no one should kill more than 10 a day.—EDITOR.

Some 3 or 4 weeks ago I wrote you, asking where I could procure a good duck call, not knowing you at the time. With the view of assisting me you published my note in RECREATION, and now I must ask you to thank, through RECREATION, the 3 or 4 dozen sportsmen who so kindly answered my inquiry and recommended various calls. The letters received in answer to the one in RECREATION show the kindly feeling existing among all true lovers of the rod and gun, and the willingness to give one another information. Several parties inquired of the game in this section, and as I have not the available time to answer them by letter, will further ask you to advise them that we have deer, ducks, squirrels and quails,

H. E. Scott, Columbia, S. C.

We had been hunting ruffed grouse since morning; it was getting well along in the afternoon, and we hadn't found a bird. We were going over a white birch knoll, and my companion was regaling me with stories of some remarkable shots he had made. Once, he told me, an eagle had flown from a crag some 300 yards ahead of him, and he had cut its head off with his trusty Winchester. Just then a big grouse flushed almost under our feet and lit in a tree about 25 feet away. Remembering my friend was my guest, I told him to shoot. Away he blazed, and off flew the grouse with never a feather touched. My friend was short of remarkable shot stories all the way home.

G. F. Dayton, Edmundston, N. B.

In answer to D. G. Gunn's query, "Who can beat that?" I give an experience of mine while hunting in Jackson Hole, Wyo. One afternoon my brother and I went out for antelope on the benches along Snake river. On our way we saw a flock of 10 or 15 mallard ducks in a little creek. Waiting until they bunched I took a shot at them with my .30-40 Winchester. I got 2; one was shot through the eye and the other's neck was broken. I went to pick them up and found another in the grass by the side of the creek. That one was not hurt in the least, and the only explanation I can give is that he was scared to death. I used a steel-nosed bullet. This is a little

better, I think, than Mr. Gunn's experience.

Brown Higman, Minneapolis, Minn.

Have decided to become a member of the L. A. S. I have been following its work, through RECREATION, and put off joining because I thought you were overdoing the roasting business. Now, however, I have seen the effect it has on men who fear getting laid out cold in print, and have come to the conclusion that it is good medicine, if it is drastic. I am not a dude sportsman, but a common, everyday toiler, with 2 weeks' vacation a year in the wo. ; but I want to see the game protected. Only through protection can those of my cl. have any sport in proper season. Kindly forward application blanks and circulars.

W. B. Truesdell, Rochester, N. Y.

In May RECREATION D. E. Moxley says that the law protecting deer was not violated in this State last winter. I have it from a friend who spent a week in the Adirondacks last fall that while there he saw 5 dogs running deer. If I can get to the woods this season and see any dogs running deer there will be fewer dogs in the Adirondacks, or you can call me a poor shot. I would count my trip as much of a success if I could knock over a few of those hounds as if I got the deer they were after.

J. M. Furnside, Schenectady, N. Y.

In reply to your letter relative to reported flocks of passenger pigeons in this vicinity, will say I have investigated the matter. In this case, as in so many others, mourning doves were mistaken for the "real thing." They congregate by thousands at a roosting place on Cedar Point, just West of this city, and some embryo ornithologist spread the report that the passenger pigeons had returned. I am sceptical of the truth of their reported reappearance at various points; but should I ever be convinced of their presence in this section I will promptly notify RECREATION.

E. F. Gamble, M. D., Coldwater, Mich.

I received a letter from you asking if I had killed 17 deer on one hunting trip. Yes, I killed 17 deer in 2 days in October last.

Mark Batty, Vernal, Utah.

ANSWER.

And thus you have branded yourself as a disgrace to the community in which you live. I am astounded that there could

be found anywhere on the continent a man who, in these days of the rapid disappearance of our game animals, would commit such an atrocious piece of slaughter. The punishment for such an act should be as severe as that for horse stealing.—EDITOR.

Henry Sayer, of the sheriff's office at Seattle, was called out of the county a few days since. He put in a day duck shooting on the Samish flats, and came back with 67 fine mallards as evidence of his prowess with the gun. He says that ducks are easy to get up that way, providing a man knows how to shoot. Since the Samish flats are a popular resort for Seattle Nimrods, and few of them get more than eight or ten birds in a day's hunt, his remarks are taken by a few score would-be hunters as a personal insinuation.—White River Journal.

This hoggish slaughter is outlawry. If the sheriff of King county permits his deputy thus to outrage the laws of the state and brag about it, without arresting him, he ought to be impeached. A sportsman and a hog are so unlike that the law protects the former and condemns the latter.—New Whatcom (Wash.) Blade

Here is another editor who knows a hog when he sees its bristles.

Mr. James M. Southwick, Curator of Natural History in the Museum at Providence, R. I., states that a number of deer have appeared in that State within the past 3 or 4 years. Can any one tell where they came from, or how they managed to reach little Rhody, from any of the places where deer are usually found.

The sportsmen and naturalists of Rhode Island are making an effort to have a law passed protecting these deer for a number of years, and this should be an easy task.

We may congratulate ourselves on the progress made during the past year, for certainly more and more people are coming into line. The result in bird protection is especially gratifying; but much more might be done during 1900. The request of our president shall receive an immediate response; and I hope the proposed bills may be passed. Depend on my readiness to do all in my power to promote the interests of the L. A. S.

J. B. Warren, Principal Glenwood Grammar School, Rochester, N. Y.

I have been much interested in the reports published in RECREATION concerning the return of the pigeon. I enclose a pertinent clipping from the Salem (O.) Daily News.

P. A. Greenamyre, Columbiana, O.

The other day Michael Healy, of the Bolivar Gun club, shot a perfect specimen of the wild, or passenger, pigeon, the first seen near Bolivar, N. Y., since 1889. The beech ridges a few miles South of Bolivar were a favorite roosting ground for pigeons, and thousands were slaughtered every year. The last great nesting in this region was in 1886.

I have just been reading^g January RECREATION, and it is as good as ever. Your work of roasting game hogs is bound to be successful in the end, even though some porker squeals a little. They can not help thinking. You are right; such men as W. L. Cassidy, of South Bend, Ind., ought to be stopped by law from going out, battleship-like, and firing broadside at a flock of dazed birds. Keep up your good work.

J. Schoonman, Taunton, Mass.

John F. Schroeder, of Calumet, Mich., a restaurant keeper, was arrested some time ago by Deputy Game Warden C. E. Brewster, of Grand Rapids, for selling game in close season. His premises were searched, and 19 quails and ruffed grouse were found in his possession. He was fined \$25 for each bird, making an aggregate of \$475, and it is not at all likely that he will wish to serve any more game to his patrons, at that price.

Here are measurements of my big moose head: Length of left horn, 42 inches; length of right horn, 41 inches; spread of horns at tips, 53 inches; nearest point between horns, 20½ inches; front prong to head, 26 inches; around neck, 47 inches; around nose, near eyes, 38 inches.

R. W. McGuire, Virginia, Minn.

This is one of the favored spots of the Rocky mountains; good fishing, hunting, etc., and one of the finest climates on earth. I catch big trout out of the St. Vrain river 2 blocks from my office.

W. H. Phelps, Lyons, Colo.

The pintail grouse turned out here in the last 2 years are doing nicely. While trout-ing last season. I saw 13 grouse and found 3 nests. If we can keep the hogs away we shall have many birds next fall.

Bert Robinson, Washburn, Wis.

This is the best game country I have seen. No finer fishing for any kind of trout can be had in the Rocky mountains. Plenty of grouse—sharp-tail, blue and sage—and large game of all kinds.

John Ching, Kilgore, Idaho.

Quails, which have been extremely rare for 10 or 12 years past, are, thanks to the game law, becoming abundant. I often meet 3 or 4 coveys in half a day's drive.

A. Lindemann, Cascade, Ia.

Will W. H. Freeman, whose photograph entitled "I Am No Hog" is printed on

page 339 of November, '98, RECREATION, please send address to this office?—
EDITOR.

Keep pouring hot shot into game hogs and pot hunters, Brother Shields. That just suits me. Where you lose one subscriber by your strictures you gain a dozen.

C. V. Oden, Roseburg, Ore.

Rabbits, grouse and quails are abundant here. We turned out the quails 4 years ago last winter. The sportsmen of Connellsville put out a lot last spring.

John Slater, Moyer, Pa.

I am pleased to see how you roast the hogs. I think any man who shoots sitting birds is a pot hunter. There is little game here.

George Allen, Kearney, N. J.

I should like to hear from some one in Colorado or thereabouts who intends going on a bear hunt this spring.

Geo. W. Harp, Brinley, Ohio.

Quails wintered well here, considering the severity of the season, and we have every prospect of good shooting this fall.

A. McAlpine, Watervliet, Mich.

Recently I went to sleep to the tune of honk! honk! as several hundred geese flew over our town.

Ledoux Bringham, Alexandria, La.

You, through RECREATION, do more for game protection than all the other magazines and papers put together.

Harry M. Beck, Wilkesbarre, Pa.

Deer are becoming so numerous as to greatly annoy farmers by getting into their crops.

J. H. Mear, St. Andrew, N. S.

There are thousands of quails and chickens in Phillips county, Kansas.

H. Frater, Wilcox, Neb.

I received your premium of a 2-pound can of Laflin & Rand powder, and it is a number one. For penetration and cleanliness this powder is unsurpassed.

G. M. Pflug, Springfield, Neb.

Please accept my thanks for the Marble camp axe you sent me. Have given it a thorough trial and am more than pleased with it.

Chas. Engle, Erie, Pa.

FISH AND FISHING.

THE FISH FAUNA OF FLORIDA.

B. W. Evermann, in a recent pamphlet issued by the U. S. Fish Commission.

There is perhaps no State in the Union whose fishes have attracted more general attention than have those of Florida. The interest in the fishes of this State is shared by the commercial fishermen, the angler, and the ichthyologist. The number of species that are sought because of their commercial value is far greater than in any other section of America. Those that are of interest to the angler are more numerous than any other State can boast, while the richness and peculiarities of the fish fauna of Florida have made this State a fascinating field to the ichthyologist and student of geographic distribution.

The total number of species of fishes known from Floridian waters is about 600, or about 1/5 of the entire fish fauna of America North of Panama. This number is far larger than can be found in any other section of our country, and is due to the diversity and peculiarities of the climatic conditions already mentioned. The Florida fish fauna may be regarded as made up of at least 5 more or less distinct faunas: (a) The salt water fauna of our South Atlantic States, (b) the subtropical fauna of the Florida Keys, (c) the Gulf of Mexico fauna, (d) the fresh water fauna of the Southern portion of the Lower Mississippi Valley, and (e) the fresh water fauna of the Everglades.

These, of course, overlap more or less, and in a consideration of the entire fish fauna of America these regions would not be regarded as constituting distinct faunal areas; but for our present purpose they may properly be considered as fairly distinct. From Fernandina Southward to Biscayne bay are found most of the species characteristic of the coast South of Cape Hatteras. From Biscayne bay to Key West and the Tortugas is found a fish fauna marvelous in its multitude of species and in their richness of coloration.

Among the fishes of this region which deserve special mention are the great numbers of groupers, snappers, grunts and porgies, all important food fishes; the many labroid species, such as the hogfish, pudding-wife, and the various parrot-fishes, all remarkable for their brilliant coloration; the many species of pipefishes, the tangs, angel-fish, and chætodonts, among them several of the most gorgeous of American fishes.

The fish fauna of the Florida Keys resembles that of Cuba very closely. Nearly all the food and game fishes at Key West are also found at Havana. The warm waters of the Keys serve as a more or less effective barrier to the passage of fishes living in colder water. As a result, many species are found on the East coast of Florida which do not occur on the Gulf coast, and vice versa. There are so many species found on the West coast of Florida that are not known from the East side that the 2 coasts may be regarded as having separate faunas. This West coast fauna extends from the bay to Pensacola and beyond, and is not essentially different from that found elsewhere on the Gulf coast.

In the fresh waters of the Northern part of the State the fishes are essentially the same as occur in the streams and ponds of the other Gulf States, and include several species of minnows, sunfishes, catfishes, suckers, *Amia*, and a few darters. From the little that is known about the fresh water fishes of the extreme Southern part of the State, it is believed that the species are to a large extent distinct and peculiar to that region. There is great need, however, of further investigation in this region.

Of the 600 species of fishes credited to Florida waters, about 51 are fresh water species, 20 may be regarded as brackish water species, and the remaining 529 constitute the salt water fish fauna of the State.

The number of fresh water species known from the State is not large. They belong to the following families:

<i>Ptarmyzonidæ</i> (Lampreys).....	1
<i>Lepisosteidæ</i> (Gars).....	3
<i>Amiidæ</i> (Bowfins).....	1
<i>Siluridæ</i> (Catfish).....	8
<i>Catostomidæ</i> (Suckers).....	1
<i>Cyprinidæ</i> (Minnows).....	7
<i>Euciidæ</i> (Pikes).....	2
<i>Peciliidæ</i> (Killifishes).....	13
<i>Aphredoderidæ</i> (Pirate Perch).....	1
<i>Atherinidæ</i> (Silversides).....	1
<i>Elassomidæ</i> (Pygmy Sunfishes).....	1
<i>Centrarchidæ</i> (Sunfish and Bass).....	10
<i>Percidæ</i> (Darters),.....	2

Of these 51 species the only ones of commercial importance are the catfishes, pikes, sunfishes, and the large mouth black bass. This list is remarkable in that it contains so few of the *Catostomidæ*, *Cyprinidæ*, and *Percidæ*. Each of these is a very large

family, the approximate number of species of each in American waters being as follows: *Castostomidæ*, 70; *Cyprinidæ*, 227; *Percidæ*, 88.

The most Southern locality in Florida from which specimens of fresh water species have been obtained is Miami, 8 species having been collected there in the Miami and Little rivers in 1896. Doubtless many additional species will be discovered when the waters of the State are more thoroughly explored. The regions which promise the richest and most important results are the Everglades, the lakes in the interior South of Lake George, and the streams crossing the Northern boundary of the State.

In this category may be included all those species which live habitually in brackish water, those more truly salt water species which are also found more or less commonly in brackish and even fresh water, and those more truly fresh water species which are occasionally found in brackish water. In this division will fall, of course, all anadromous and catadromous species, such as the shad and the common eel. The family having the greatest number of species in this division is the *Pacilidæ*, pre-eminently the family of brackish water fishes. Florida contains 21 species of this family, of which at least 8 live habitually in brackish water and each of the other 13 may occasionally occur there. This family is worthy of note as containing the smallest known fish, *Heterandria formosa*, which is less than an inch in length.

* Two species of shad are known from Florida. On the East coast the common shad (*Alosa sapidissima*) is a common and valued species. It occurs regularly and in considerable numbers in the St. Johns and St. Marys rivers and rarely in the Indian river. It is not positively known to occur in any other waters of the State. At Pensacola a few young shad were obtained by Dr. Jordan in 1882 and provisionally identified as a species distinct from the common shad, but no name was given to them and no description published. In the spring of 1896 an unusually large run of shad occurred in the Black Warrior river at Tuscaloosa, Ala., and specimens were sent to the United States Fish Commission for identification. They proved to be different from the common shad and a new and undescribed species, to which the name *Alosa alabamæ* was given by Jordan and Evermann. When studying these specimens I also studied those from Pensacola (now in the United States National Museum) and found them identical with the Alabama shad.

Shad have been reported from various West Florida rivers, particularly Suwanee,

Apalachicola, and Escambia rivers. It is not positively known what species these may be, but it is more than likely they are the Alabama shad. An actual examination of specimens from those rivers will be necessary to determine the matter, and the United States Fish Commission would be glad to receive specimens from anyone who has an opportunity to collect them.

The great majority of Florida fishes are, of course, salt water species, there being not fewer than 529 species, distributed among many families and genera. On the East coast approximately 175 species are found, among the Florida Keys 290, and on the West coast about 300. Several important species are found throughout these 3 regions. Key West is the most important and interesting of all Florida localities as regards the number of species, about 250 species being known from there, of which about 100 are food fishes of greater or less importance. The richness of Key West in food fishes will be seen when we recall the total number of food fishes in each of the other important fishery regions of the United States, as shown in the following list:

South Atlantic States.....	55
Middle Atlantic States.....	50
New England States.....	48
Pacific States	40
Great Lakes	16
Gulf States (Florida excepted)....	42

The more important species handled at Key West are the grunts (6 species), the porgies (5 species), the groupers (8 species), the snappers (4 species), the hogfish, kingfish, Spanish mackerel, the carangoids (8 species), and the mullets (3 species). Besides these there are some 60 or 70 species which for one reason or another are less important, but are nevertheless handled to some extent. A great many, perhaps a majority of the food fishes at Key West occur also about Cuba and may be seen in the Havana market.

The method of handling fish at Key West is unique, and calculated to conserve the fisheries of that region to the fullest extent. Practically all of the fishing is done with hook and line, and every fishing boat has a well into which the fish are placed. All salable fish are brought to market in the wells of the vessels and kept alive until sold. The prospective purchaser visits the fish wharf, selects from some one of the boats the fish he desires, and it is then killed and dressed by the fisherman. This excellent method insures perfectly fresh fish to the purchaser, and few or no fish are lost or wasted.

There is no other place in the United States where one can study live fishes so

satisfactorily as at Key West. Fishing boats are lying at the fish wharf at all times, and in their wells may be seen specimens of numerous species, many of them of brilliant coloration; and by going out with the fishermen upon the bars and coral reefs one may, by the aid of a water glass, spend many hours observing and studying a multitude of fishes and other interesting forms as they disport themselves in the clear waters beneath the boat.

While the waters in the vicinity of Key West are wonderfully rich in species of fishes used as food, not all the food fishes of Florida are found there. The shad does not occur there; neither does the black bass nor any of the fresh water species; nor do we find there, except possibly as stragglers, the spotted sea trout, the red drum, spot, whiting, pompon, flasher, and perhaps still other species known from Indian river. Additional species are known from Pensacola which do not occur at Key West. The total number of different species of food fish now known to occur in the waters of Florida is approximately 140, divided among 36 different families, as follows:

<i>Acipenseridae</i> (Sturgeon).....	1
<i>Siluridae</i> (Catfishes).....	4
<i>Catostomidae</i> (Suckers).....	2
<i>Cyprinidae</i> (Minnows).....	1
<i>Anguillidae</i> (Eels).....	1
<i>Elopidae</i> (Tarpons).....	2
<i>Albulidae</i> (Lady-fishes).....	1
<i>Clupeidae</i> (Herrings).....	8
<i>Luciidae</i> (Pikes).....	2
<i>Esocidae</i> (Needle-fishes).....	2
<i>Hemiramphidae</i> (Balaos).....	4
<i>Mugilidae</i> (Mulletts).....	4
<i>Sphyrænidae</i> (Barracudas).....	2
<i>Polynemidae</i> (Threadfins).....	1
<i>Holocentridae</i> (Squirrel-fishes).....	1
<i>Scombridae</i> (Mackerels).....	4
<i>Trichiuridae</i> (Cutlas-fishes).....	1
<i>Carangidae</i>	14
<i>Pomatomidae</i> (Bluefish).....	1
<i>Centrarchidae</i> (Sunfishes and Black Bass).....	10
<i>Centropomidae</i> (Robalos).....	1
<i>Serranidae</i> (Sea Bass).....	10
<i>Lobotidae</i> (Triple-Tails).....	1
<i>Lutianidae</i> (Snappers).....	8
<i>Hæmulidae</i> (Grunts).....	12
<i>Sparidae</i> (Porgies).....	12
<i>Gerridae</i> (Mojarras).....	4
<i>Kyphosidae</i> (Rudder-fishes).....	1
<i>Sciaenidae</i> (Croakers).....	11
<i>Labridae</i> (Wrasse-fishes).....	1
<i>Scaridae</i> (Parrot-fishes).....	2
<i>Ephippidae</i> (Angel-fishes).....	1
<i>Chaetodontidae</i> (Butterfly-fishes).....	3
<i>Teuthiidae</i> (Tangs).....	3
<i>Scorpenidae</i> (Rockfishes).....	1
<i>Pleuronectidae</i>	4

This large number represents about 1/20

of the entire fish fauna of America North of the equator.

The value to the State of these commercial fishes need not be dwelt on here. Suffice to say that the money value of the annual fish output of the State is, in round numbers, not less than \$1,000,000.

The fame of the game fishes of the State of Florida extends throughout America and beyond. Wherever there are anglers and rod and gun clubs the prowess of the "silver king" is known and talked about. The one great hope of every angler is that he may go to Florida and kill a tarpon before his fishing days are over. But while the tarpon or silver king is the king of the game fishes of this State, it is by no means the only game fish. Some of the largest black bass known have been caught in Florida waters. The sunfishes are the largest of their kind. The ladyfish and the bonefish are thought by many to equal their relative, the tarpon, in real game qualities. Trolling for kingfish, jack, crevallé, bluefish, Spanish mackerel, and spotted sea trout at Indian river, Lake Worth, Key West or Biscayne bay furnishes sport of the most exciting kind; while still fishing for sheephead and mangrove snappers at Indian river inlet; for chubs, porgies, porkfish, yellow-tails, snappers and grunts at Key West; or for red snappers, red groupers and others of their kin on the Snapper Banks, furnishes sufficient variety to please any angler, in whatever mood he may chance to be. I have fished in every State and Territory in the Union but 3, and from Siberia and Bering sea to the gulfs of California and Mexico, and, all things considered, regard Florida as unequalled in the richness and variety of its attractions for all sorts of sport with rod and reel.

A RECORD SMALL MOUTH.

In November RECREATION Dr. I., of Cincinnati, inquires for the largest small mouth bass on record. I believe Wisconsin and Lake Mendota have it. I enclose relative literature. I sent you an account a year ago, which you published, but evidently the doctor did not see it. I can testify to the truth of the story, as I saw the bass both before and after it was mounted. I was also in a boat from which one was speared, a number of years ago, that tipped the scales the next day at 7 pounds 9 ounces.

C. M. Clarke, Stoughton, Wis.

Enclosed with Mr. Clarke's letter is a circular from which the following is an extract:

On November 28, 1898, Isaac Palmer, of Madison, Wis., while fishing from a boat,

in a blinding snow storm off Governor's island, in Lake Mendota, Madison, Wis., with rod and reel, hooked and landed a small mouth black bass that, when taken from the water, weighed 8 pounds 10 ounces, and measured $24\frac{3}{8}$ inches in length and $17\frac{3}{4}$ inches in girth. So far as is known, this is the largest specimen of the species *Micropterus dolomieu* ever caught in America. The truth of this statement is proved by the presence of the fish, now mounted and on exhibition in Madison, and by the sworn affidavits of not less than 8 well known and responsible business men of the city, who were present when the fish was weighed on several scales, and who saw the measurements taken, said affidavits being attested by the Secretary of State, and bearing the great seal of Wisconsin.

DEPLETING THE STREAMS.

Many wonder why the supply of fish in our inland waters becomes steadily less. There are several reasons, the chief one being the violation of the fish laws by netting, spearing, using set lines, etc. Of course, all wild life, including fish, will decrease as civilization advances. The improvements, such as removing natural growth of timber, brush, etc., and all artificial drainage tends toward the destruction of wild life. Again, as the population increases, anglers increase, methods of capture increase, while all bodies of water decrease and the fish become less. Netting and spearing fish in the spring not only destroys the finest specimens, but that season's spawn is also destroyed. Keep up this method of warfare several years and the result is obvious. Another cause, and one extremely hard to remedy, is the fish hog, who, like his twin brother, the game hog, kills to make a record. Not being content with a reasonable catch, he kills all he can, big and little.

There are good laws for the protection of fish and game, but until there is a great change in public sentiment in favor of enforcing such laws it will be extremely difficult to accomplish this, though an occasional conviction has its good effect.

When a majority of the people look on a violation of the fish and game laws in the same light as other violations of law, then we may look for an increase of both fish and game. When individuals who wish to see the laws enforced will testify against violators, then violations will cease.

Will L. Robinson, Union City, Mich.

NEW FISHES FROM PUERTO RICO.

I have received from the U. S. Fish Commission an excerpt from its annual report, containing "Descriptions of New

Genera and Species of Fishes from Puerto Rico," by B. W. Evermann and M. C. Marsh.

This is a preliminary publication of some of the scientific results of explorations in Puerto Rico by the U. S. Fish Commission during January and February, 1899, in advance of the general report on a biological expedition to Puerto Rico by the U. S. steamer Fish-Hawk. The work relating to fishes was under the immediate direction of Doctor Evermann, ichthyologist of the U. S. Fish Commission, assisted by Mr. Marsh. The island was circumnavigated, trips were made to the interior fresh waters, and some neighboring islands visited.

In the present article the authors describe 3 genera and 20 species new to science. The list comprises an eel, 2 anchovies, a sea bass, a porgy, a wrasse-fish, 4 gobies, and 10 blennies. The 3 new genera are of the blenny family.

The various groups of animals collected on this expedition are now being studied by specialists in these lines, and the results of their studies will be embodied in the forthcoming report.

AN UNEXPECTED CATCH.

We were fishing for bass; had just put on my first minnow for the year '98. Letting the line run off I noticed one strand of the silk was broken. Just then I had a strike, and away went the line, not in a mad rush, but steadily and straight. After going about 50 feet the fish stopped, turned and swallowed my minnow; then came back within a few feet of the boat. By that time I knew it was not a bass. I thought of a weak joint in the rod, of the broken strand, and as the fish made a run for some floating logs I pulled. Then he headed for a bunch of willows, and I thought the 9-ounce bamboo would not stand the strain. Finally he came out and tried again for the logs. So far I had not seen my fish, but was content to know we were both on the same line. Then, while he was moving more slowly, I gradually brought him near the surface, and saw I had a muskalonge. He did not like my looks so well as I did his, and he made the water fly and the reel hum; but at last I got him into the boat. He weighed just 10 pounds. A 2-pounder was the largest bass of the day, but I was satisfied.

Stubb, Orwell, O.

NIBBLES.

Kindly tell me if the fishing on the Cuban coast is particularly good, at readily accessible points. Any information you can give me I shall be grateful for.

W. O. Watson, Charlottesville, Va.

ANSWER.

Not much is definitely known in regard to angling in Cuban waters. In general, the game fishes of Cuba are the same as those of Key West. The most important of these are the tarpon, kingfish, jack, crevallé, Spanish mackerel, spotted sea trout, lady fish, and the many species of snappers, groupers, grunts and porgies. There is sufficient variety of habit among these many species to furnish sport for almost any sort of angler. Most of these species can be found at almost any point on the Cuban coast, except in Havana harbor. Troll for tarpon, kingfish, jack, crevallé, etc., or still fish for the groupers, snappers, porgies, etc. For still fishing pieces of the large spiny crawfish are good bait.—EDITOR.

Henry's lake is on the North fork of Snake river, in the heart of the Rocky mountains. It is noted for the quantity of trout it contains. Last winter there were shipped from it to Butte, Anaconda and Helena about 50 tons of trout caught with hook and line and by spearing through the ice. This winter there are not so many men fishing, but those who are make large catches. Many fishermen are afraid of the new game warden, as a new law prohibits fishing from November 1st to June 1st. But the warden is a Mormon, and there is no place here for Mormons; so the men who have the sand to get out and fish will make a whole lot of money this winter. Harry Winston buys the fish at 6 cents a pound, and ships them to Butte, Mont. Anyone who likes to catch fish cannot do better than to come here.

Toby Anderson, Henry's Lake, Idaho.

I have taken this matter up with the Governor of Idaho and hope to have these fish hogs brought to justice.—EDITOR.

Striped bass are beginning to appear along the coast of Southern California and several fine fish have been taken recently. While fishing in the channel at the mouth of Alamitor bay, R. E. Masters, of Long Beach, took 2 specimens, weighing 12 and 14 pounds, respectively. John McGarvin also took 2 bass of about 15 pounds each. It is hoped this fine game fish may in the near future become plentiful here. Halibut and mullet are now abundant in the small bays and inlets along the Orange county coast. James Goodlin, while working at the inlet of Bolsa bay, made a lucky catch with a shovel. The tide was coming in over the bar, and Mr. Goodlin noticed a large fish struggling in the shallow water and killed it with his shovel. It was a mullet weighing 10 pounds, the largest one I ever saw.

B. C. Hinman, Bolsa Bay, Cal.

At the instigation of Game Warden J. C. Mead, L. N. Edwards was recently arrested for fishing with a gun for land-locked salmon, at the mouth of Rogers' brook. He was brought before Justice Lewis H. Corliss, pleaded not guilty, and asked for an adjournment until counsel could be secured. At the appointed time the trial took place. As the evidence appeared to be all in favor of the prosecution Justice Corliss found Edwards guilty of the alleged misdemeanor and ordered him to pay the minimum fine for such an offense, \$10 and costs, amounting to \$14.24, which he paid. Fortunately, he did not secure a fish.

E. M., Bridgton, Me.

In February RECREATION, page 128, I notice an article from W. Prindle, Bland, N. Y., entitled "A Black Bass Parasite." I have found the same parasite in black bass. Last summer, when fishing in Groton pond, I first found them. We did not see them when we scaled the fish. Afterward, to expedite matters, we skinned the fish, which disclosed the worms. They were rolled up like snail shells. I never saw them move, but was quite sure they would be worms a little later. They were all through the meat, but not in large numbers. We saw them in no other fish and we ate no more black bass.

Carlos L. Smith, Montpelier, Vt.

Seven of us were at Wachaug pond 5 days, trap fishing for pickerel. We did not expect to catch any black bass, as we had been to the same pond 3 winters and had never caught one; but this year we caught 12. The largest weighed 5½ pounds. The pond is large for the small State of Rhode Island, covering about 200 acres. In some places the water is 40 feet deep. Three or 4 years ago the pond was stocked with land-locked salmon, but I have never heard of any being taken. Trap fishing is all right in some respects, but I like rod fishing better.

W. E. Patt, Providence, R. I.

Contraband fish nets valued at \$445 went up in smoke at Squaw Island, near Buffalo, a few days ago. The cremation was conducted by Fish and Game Protector Tom Carter, in the presence of his staff, together with M. C. Worts of Oswego, assistant chief game protector and forester and a reporter of the Courier.

The bonfire was a fierce but picturesque one. The flames, fed by the coal oil and tar, licked up the nets, together with the poles and corks in a few minutes.

Protector Worts arrived in the city on Wednesday and will remain here the larger part of next week to push the trials of those who were caught by Protector Carter while engaged in illegal fishing during the past season.—BUFFALO COURIER.

It is as easy as falling off a log to get subscriptions for RECREATION.

N. Schiffer, Brilliant, O.

GUNS AND AMMUNITION.

SYRACUSE, WINCHESTER AND KING.

Editor RECREATION:

The last number of your bright and newsy magazine is at hand, and as usual I turn to the department most interesting to me, Guns and Ammunition. I do not pose as a know-it-all or an indisputable authority on the subject; but I have crowded a great deal of enjoyment with dog and gun into the past 20 years. I have killed all the different varieties of small game, from Minnesota and South Dakota to Oklahoma. Have used all kinds of American guns, as well as several of English make. Have shot over all the different breeds of bird dogs, from a cross-eyed Irish setter to the Kent and Croxteth and Pape strain of pointers. Have used all the shot guns advertised in RECREATION, with the exception of the Forehand. For shooting qualities they are excellent value in double guns. Syracuse guns are the most securely fastened and are built on perfectly sound mechanical lines. For guns ranging in price from \$50 up there is not much difference in the various makes. The \$30 Syracuse is the best value ever offered in the gun line in this or any other country. If I were to buy a carload of \$30 double guns they would all be Syracuse. I don't owe the Syracuse Gun Company anything. I bought 2 guns of them, both of their cheapest grade. I received 100 cents in value for each dollar I paid them. I advise anyone who is undecided as to what gun to buy to make up his mind whether he wants a double gun or a repeater. If the former, try the Syracuse. In pump guns there is only one, the Winchester, '97 model. Because a man prefers a pump gun it is no sign he has bristles and desires to exterminate the game. A sportsman is not made or unmade by the gun he carries. If he were, many a kid glove sportsman, with a high grade ejector, would have to take a back seat for the farmer's boy in blue jeans with his cheap Belgian gun and black powder shells. I am willing to buy my celery from Kalamazoo, Michigan, but I beg to differ from "Old Shooter" of that place when he says in your September issue that a man shows the nature of the barn-yard animal when he buys a pump gun. A man may only have \$18 to invest in a gun, and that amount is better invested in a repeater than in a cheap double gun. With a single barrel he can get a more accurate aim. The pump gun is considered by many sportsmen the more humane weapon, as the extra shells in the magazine may be quickly used to put a

crippled bird or animal out of misery. That is a distinct advantage over the double gun, as wounded game often gets away to die a painful, lingering death before the man with the double gun can reload; while the man with the pump gun merely has to press the button and the cripple is at once freed from suffering. I see no excuse for this tirade against the repeater. Limit the number of birds to the gun, as fish to the rod, if you will, but never undertake to dictate to the sportsmen of this great country that they must use a certain kind of gun to be called true sportsmen, or refrain from using another kind for fear of being called game hogs. Let us all remove the shells from the gun, call the old dog to heel, and quit when we have a reasonable bag of game. Then and not until then will there be an abundance of game left for those who are to follow us.

I have used all makes of powder. I notice some companies do not advertise in RECREATION. I infer from this they do not want the trade of the better class of sportsmen. Well, they should not have it unless they will contribute their mite toward game protection by advertising in your magazine when you are spending so much money for the cause.

In answer to one of your readers who wished to know how King's semi-smokeless acted in shot guns: It is the cleanest powder I ever fired from a gun. Makes almost as much smoke and noise as black powder, but on the score of cleanliness and strong shooting leaves nothing to be desired. Am going to try it in a Remington army revolver and will report results.

I heartily commend your work for game protection. You are doing more effective service in its interest and for all that constitutes true sportsmanship than all the other papers and magazines combined. RECREATION is in a class by itself.

C. H. Kessler, Des Moines, Ia.

A BUNCH OF ANSWERS.

Kindly allow me to answer a few queries which I have seen asked in recent issues of your interesting magazine.

First, I should like to give the results of a little shooting I did with a Winchester repeating shot gun:

1. At 40 yards, 3 drms. smokeless powder, 1-15 chilled; result, 1-3 inch in pine target.
2. At 50 yards, 3¼ drms. black powder, 1-B B; result, ¾ inch in pine target.
3. At 65 yards, 3 drms. smokeless pow-

der, 1-5 chilled; result, $\frac{1}{8}$ inch in pine target.

4. At 70 and 75 yards, $3\frac{1}{4}$ drms. black powder, 1 $\frac{1}{8}$ -8 drop; result, $\frac{1}{8}$ inch in pine target.

5. At 60 yards, 3 drms. black powder, 1-6 drop; result, $\frac{1}{8}$ inch in pine target.

6. At 80 and 90 yards, $3\frac{1}{4}$ drms. black powder, 1 $\frac{1}{8}$ -5 chilled; result, $\frac{1}{8}$ inch in pine target.

7. With 3 drms. black powder, 1-8, I shot out over a frozen lake. I measured the distance. At 35 yards the first pellet struck, and at 140 yards the last one rolled out on the snow. At 100 yards the charge had spread 6 yards, and had, I believe, penetration enough to make good kills. This was also shot by the repeater.

To S. W. Owens: A gun with stock 13 of 13 $\frac{3}{4}$ inches long, 1 $\frac{5}{8}$ or 1 $\frac{3}{4}$ inches drop at comb, and 2 $\frac{1}{2}$ or 2 $\frac{3}{4}$ inches drop at heel, ought to be good for you.

I would advise R. I. O. Travers to get a Winchester "Brush" or "Riot" shot gun, for buckshot.

"Sport," of Schenectady, N. Y., will find a choke bore gives the better penetration.

Allow me to ask that same question: Why is it the '92 model Winchester, .25-20, gives more penetration than the .25-20 single shot, when the latter has 2 grains more of powder?

Mr. F. B. Ellis inquires about the .32-40, .30-40 or .30-30. I do not know why the .32-40 would not be a good rifle for general use. Of course, it is not such a powerful one as the .30-30, its velocity and penetration being less; nor has it such a flat trajectory. I feel as Mr. Ellis does regarding the fellow who pumps lead.

To R. C. C., Seattle, Wash.: Shooting round balls from choke bore guns will not prove satisfactory. It is all right for a cylinder bore.

I can, with Mr. Peterson, recommend the Ithaca hammerless. The Baker is another good investment. The Remington is good, too.

To T. M., Southborough, Mass.: Both actions are excellent, strong and durable. Of course the slide is a trifle quicker to work and more up to date. Neither action is likely to jam shells if proper ones are used, viz., Winchester shells. I have had other makes stick when entering barrel.

What J. H. Ramsay says I believe to be true, but let us hear from some one who is able and willing to make such a test.

In reply to H. L., Hackberry, Kan.: 1. Stevens No. 5 expert rifle is an excellent one for target use, and Stevens Favorite, or their No. 44, for rabbits and prairie dogs. These rifles use the .25 and the .25-20.

2. Yes.

3. It will handle that bullet.

To R. S. D. Loach: You will find that the .25-20 carries too light a load for deer, it having only 17-86 grains.

The .25-35 or .30-30 Winchester would please Dr. Cabell. The .303 Savage is also a good cartridge.

Tell "Ramrod," Lacolle, Can., to use factory loaded .30-30 shells, short range.

Will Winchester, Lake Forest, Ill., kindly prove to me that the .32-40 is more accurate than the .30-30?

I believe the repeating shot gun to be perfectly legitimate. Are we all going to be condemned for using it, simply because some game hog chooses to empty his gun at a single bird?

M. W. F., Port Hope, Ont.

THE GUN OF MY DADDY.

My first gun was an heirloom. It had been used by a long line of ancestors; and when I recall the pranks it is said to have played and the havoc it wrought, I marvel that I ever came into existence. Originally it was a flint-lock, long and heavy; later, it was altered to a percussion lock. The stock extended two-thirds of the length of the barrel and was secured thereto by 3 ferrules.

I was yet a lad of tender years when it came into my possession. Well do I remember the morning when, with a light heart and parental approval, I took the old gun and set out alone to bag my first game.

I directed my steps to a small pond, where, in those days, ducks in goodly numbers resorted. There I found as pretty a flock of teal as ever man saw. Approaching cautiously through the bushes which skirted the pond I raised the piece and pulled the trigger. To my dismay, only the cap exploded, and the much coveted birds took flight. When I had exhausted the reprehensory adjectives at my command I sat down to consider. Resting the gun on my knees, I picked the priming hole with a pin and recapped it. While lowering the hammer it in some way slipped from my fingers. Presto! All the constellations immediately crowded into view. When they ceased to glitter I found myself in a reclining position. The old gun had kicked itself free from the ferrules and ramrod, which I still held in my hand, and was standing erect in the ooze nearby. Around was falling a shower of debris from a shelly ledge behind me, where my heavy charge of big shot had started a little avalanche. Retracing my steps, gameless, but rich in experience, I sought an opportunity and traded the old weapon for one of a more modern type.

A. W. Burnham, Fortune's Rocks, Me.

PERFORMANCE OF A MAUSER.

In August RECREATION G. E. M., Somerville, N. J., says he would like to hear from some one owning a Mauser rifle. I have a 7.7 Mauser, model '93, captured at Santiago. It is not a pretty gun to look at, but it is simple, strong, accurate, hard shooting, and will stand lots of rough usage without getting out of order. The bolt has 2 locking lugs, while the Krag-Jorgensen has one. It can be withdrawn, taken apart, cleaned and replaced with no other tool than the fingers. I had the Ideal Company make a set of reloading tools (the first 7.7 they ever made), with cylindrical mould for patched bullet. I have had good success using 20 grains of Dupont's .30 calibre powder. Bullets must fit tightly, as the rifling is shallow. There is a disadvantage in the .30 caliber powder with small charges; it is not all burned. Unconsumed particles of powder sometimes get from the shell into the action of the gun and cause trouble. With 40 or 43 grains .30 caliber powder and a 175 grain full jacketed bullet the powder is all consumed and a tremendous velocity obtained. I now use Dupont's No. 1 smokeless for patched bullet (one part tin, 10 of lead) with excellent results.

Have not tried the rifle on big game, but have shot porpoises from the ship with it, killing them instantly. Have filed a crease on the point of bullet, cutting through the metal jacket, and then shot a porpoise with it. He stopped as if he had been struck by lightning.

If G. E. M. wants to see the effect of a Mauser bullet at short range let him take a quart can, fill it with water, hang it on a limb and shoot at it with a full jacketed Mauser bullet. He will be surprised at results obtained.

Lewis H. Higgins, master SS. Barnstable.

THE PUMP GUN.

I notice in October RECREATION that Charles Cristadoro not only berates the pump gun, but those who use it. He makes his statement explicit, that "the pump gun is the pot hunter's tool"; and further states that "9 out of every 10 users of the pump gun would delight to get a covey of quail into a ditch and pot them all." I am the proud possessor of a Winchester pump gun, yet I have the first covey of quails to pot, and as long as I am permitted to retain my senses I shall not commit such an act of inhuman hoggishness. There are at present 2 Winchester pump guns in our town, and neither one has ever been shot into a covey of quails on the ground. This is more than I can say of several of the double barrels guns that are in and about town. Last season one man killed 9 quails

at one shot with his single shot gun. Do not call the gun a game hog, but the man behind it. A man may carry a single shot .22 caliber rifle and yet be a game hog at heart. There is an advantage in using a pump gun, but what is it? Is it because it is such an exterminator of game? Is it because it is the game hog's gun? No! It is because of the cost of the gun. Few sportsmen can afford to pay \$50 to \$75 for a gun. They can get a Winchester for much less, and its shooting qualities are second to none. They have a good gun at moderate cost. I wish Brother Cristadoro could pay us a visit and be among our Winchesters during quail season. We would give him a pleasant reception and show him true sportsmanship with a pump gun—such as would forever banish from his mind his erroneous ideas regarding the pump gun.

Dan. M. Wogaman, Quincy, O.

HIS FAVORITE A .32-40.

I think the No. 2 .30-30 is given more credit than it deserves, and advise sportsmen to consider well before adopting a high-power rifle. An army rifle seems to have a peculiar fascination for young and inexperienced sportsmen. The oldest and most successful hunters do not favor the .30. It may be suitable for hunting on open prairies, but nothing is gained by its use in a thickly wooded country.

Four out of 5 deer are killed within 100 yards. It is not necessary to have a gun that will carry 2 miles for the sake of getting a flat trajectory, when your game is only 75 to 150 yards from you. I saw a large buck brought down at 75 yards with a .32-20 Winchester. I never owned a gun more powerful than a .38-40, and never lost a deer that was fairly hit. The last deer I shot was with a .32-40, and it fell dead in its tracks.

There has been more big game killed with the .38-40 and .44-40 than will ever be killed with .30's and .303's. I do not believe in using antiquated tools; but do believe in using the tool which possesses the greatest utility combined with the least running expense. Ammunition for the .30 is expensive, and as good shooting is learned only by much practice its cost soon exceeds that of the gun.

For a general utility gun none are so good as the .32-40 and the .38-55. Never having hunted grizzly bear, moose or caribou I can not speak of them from experience; but from black bear and deer down I know what I am talking about. I carry a .32-40 and my hunting companion carries a .38-55. If I were to change it would be to the .38-55, yet the little .32-40 has killed the most big game of the 2.

J. B. Garvin, Wheeling, W. Va.

ON A PEACE FOOTING.

Shortly after the beginning of the Yanko-Spanko war, a report became current that Spain was sending a squadron to harass our coast. At that time some of our patriotic citizens formed a company, taking the name of The Los Angeles Sharpshooters.

The company consisted of 88 fully equipped men, with Allyn Kelley, the chief promoter, as captain. Little attention was given to manual arms or drilling; but much time was spent at the range which the company put up, shooting at 200, 300, 500 and 600 yards; military rules governing. With constant practice some excellent scores were made; quite a few possible at all ranges by some of the crack shots.

When peace was declared the company reorganized, keeping the old name and retaining a majority of the old members. It is now really a rifle club. We have substituted black powder target rifles, have a fully equipped range with targets at 200 and 500 yards, shoot weekly, and hold tournaments semi-annually.

Medal days are semi-monthly, when medals in different classes and for different ranges are awarded to the shooter having the highest score of the day. If he wins a medal on 3 different occasions he retains same as his property. This produces a good deal of interest, and the rivalry is keen. Our annual meeting was held January 18, 1900, and a board of directors elected, namely, C. A. Leighton, O. H. Wescott, Allyn Kelley, D. Brockway and C. A. Blackmar. At the first meeting of the board C. A. Leighton was elected president and C. A. Blackmar secretary and treasurer for this year.

C. A. Blackmar, Los Angeles, Cal.

WHY A REPEATER IS BEST.

To answer the questions of Mr. G. R. Ruckery, I will give my experience with repeating shot guns.

1. They have few advantages over double guns, except for killing cripples in duck shooting. I think, however, that when one becomes used to a single barrel the aiming is easier than with a double gun. The Winchester repeater has one disadvantage. If for any reason you wish, while afield, to change the cartridges in the magazine, the change is not easily effected. But the gun is so finely choked and beautifully balanced that it is the best arm made for the money.

2. Repeaters are as safe as double guns. It is an advantage, to my mind, to be able to keep the magazine full of shells and the chamber empty. One may then with perfect safety climb fences, and yet be able to load the chamber in an instant.

3. There is no liability of jamming, if the slide is worked properly.

4. They wear as well as \$50 double guns, and cost $\frac{1}{2}$ as much.

5. I never knew one to burst.

6. There is little choice between the Winchester and Parker.

7. Yes, I have used the Winchester, Leffer, Parker and Tolley.

I think repeaters as good as double guns for general use. Of course you have not the advantage of having one barrel full choked and the other half-choked or cylinder. This talk of the repeater being a gun for game hogs is all bosh. I have seen few men who could get in 3 successive shots at a flock of quail.

C. D. R., Fort Logan, Col.

A GUN SHY COLLIE.

Some time ago I sent you an account of a young collie pup I had which was marvelously intelligent, but died. I now have another which is very like the first. He is somewhat gun shy, but is fast improving, so that he begins to enjoy going out with me on my trips after ducks. When I shoot from shore blind he will retrieve all the ducks I can kill. I use no boat, but at low tide wade out and anchor the decoys as far out as I can well reach. With the wind off the land the decoys are about the right distance from shore. Several hours later the tide has put the decoys beyond my depth, but my good little collie will bring every one to my feet, with its anchor, a whole brick, trailing behind.

I keep my gun in a canvas case standing in a corner near the stove. When I am ready to go on a hunt I say, "Tony, do you want to go ducking?" He will at once go to the corner, seize the case, drag the gun to the door, bring it and drop it at my feet. I do not think collies are generally supposed to be of much value for hunting, but \$50 would not induce me to part with mine. Kindness will do wonders with dogs sometimes and with people, too, for that matter. RECREATION is still improving and is the best of 4 sportsmen's periodicals which I take.

D. T. Tuthill, Orient Point, N. Y.

SMALL SHOT.

I read the Gun department in RECREATION with great interest, as it gives practical results. I own a beautiful Sharp's carbine as used by the U. S. cavalry? I hammerless rifle, model 1878. It originally shot a .40-70-330 shell. I sent it to the Remington Arms Co. and had them put on a .38-50 Remington smokeless steel barrel. It is the finest piece of work I ever saw, and for shooting, both at target and game, the rifle can not be beaten. I tried

it on a big black bear in Wisconsin last season, and it only took one shot to get him. This Remington shell is $2\frac{1}{4}$ inches long and will reload with 60 grains of powder and with 217 grain Winchester express bullet. I have a medium shell, which is large enough for anything on the continent. The success of any shot depends on where it is placed. The same results will happen with a cannon. I use an Ideal loading flask, with Laflin & Rand's Special No. 1 black powder. I have found it the finest thing in the business and good enough for me as long as it is made. I never have any misfires, and that is important, for when you need a gun, in a tight place, confidence is half the battle.

Geo. C. Edgeter, Dayton, O.

During the past summer I canvassed 2 big mail-order houses in Chicago and 3 sporting-goods houses in Washington, D. C., for the best gun on earth at the most reasonable price. I was not satisfied. These firms did not love me as they did themselves. I at first thought it was because a firm could have no soul; but I took up my September RECREATION and ran over the ads till I came to Cornwall & Jespersen's. I wrote them, told them I was a subscriber to RECREATION and asked them for prices. They sent me their catalogue, and I bought from them an Ithaca hammerless with Damascus barrels—the best gun on earth. Cornwall & Jespersen have convinced me that a firm can have a soul, and that they at least practice the golden rule. I hope they will stay with you, Mr. Editor, for I am sure the boys will patronize them when the name becomes familiar in RECREATION.

R. W. Stout, Poolesville, Md.

Is a 16-bore sufficiently powerful for an all around gun? Some manufacturers are now making a 16 shell of extra length, $2\frac{7}{8}$ inches, which holds just as much as the ordinary $2\frac{5}{8}$, 12-gauge shell. Would not the former be as effective in range and penetration as the other? I want a gun exclusively for game shooting, chiefly birds, and mostly at short range. Will some fellow sportsman kindly tell me if I am likely to find what I want in a gun of the following description: Seven pound, 16 gauge, double hammerless; chambered for $2\frac{7}{8}$ -inch shells, 30-inch barrels; left, modified choke; right, cylinder. Will such a gun give a closer pattern than a 12-gauge of same specifications, using a $2\frac{5}{8}$ shell? Would the cylinder barrel shoot a round ball with fair accuracy?

M. F. Jones, Slate Hill, Pa.

I should like to ask W. P., Westfield, Pa., what is the matter with the Baker as

a hammerless gun. I see he classes it among good hammer guns, but does not speak of it as a hammerless. I am the owner of a B grade hammerless, and would not trade it for the highest priced gun in this place, because of the firing pin safety, which makes the firing of the gun impossible without pulling the trigger. The shooting qualities of the gun are as good as any. I shot 4 brant at 4 shots with No. 6's last fall, and the 2 last were over 50 yards away. I quit right there, although I had not been out 30 minutes and could have got more birds.

C. B. Cushing, The Dalles, Ore.

I have read RECREATION and have kept quiet. But an article by A. A. Haines, entitled "Suggestions for the Winchester People," makes me want to say something. No back countryman need think he can tell the Winchester Co. how to make guns. The man is daft who can not see that putting a small caliber barrel, such as a .32, into a heavy .44 revolver frame reduces its liability to jump, and therefore makes it a better shooting weapon. But on one point I agree with Mr. Haines; I, also, never saw a Marlin repeater that would repeat.

Frank Brewer, Saratoga, Wyo.

Walter Diehm, in December RECREATION, asks about the miniature and rifle. Last summer I bought a reloading paper patched cartridges for the Savage outfit for miniature cartridges. Loaded with smokeless, those cartridges have given me great satisfaction, but not so with black powder. I load with 8 grains of Dupont's smokeless and a bullet composed of 12 parts lead to one part tin. This load will kill any small game up to 100 yards. A friend tried the factory loaded paper patched cartridges, but did not like them. He said they leaded his gun badly.

Fleming Robinson, Fairview, B. C.

The repeating shot gun has but one advantage over the double barrel. For a flock of geese you could ask for nothing better; but for duck shooting I prefer a double gun. Nor has it been my experience that the repeater is altogether safe. I once shot with one at a squirrel and missed. I pumped, and each time the gun was discharged. Examining it, I found the trigger caught. When I pushed it down the gun was all right again. On several occasions I have had shells jam in my gun. I have known a repeater to freeze up, through rain or snow getting in the action, and refuse to work until thawed out.

Ralph Barber, Bellaire, O.

I hope some day to buy a .30-30, either

Winchester or Savage. I want a gun I can use on either small or large game, and at the same time I wish a gun weighing not over 7¼ pounds. Will such a rifle, with a 20 or 22-inch barrel, be as good for hunting purposes up to and including 250 yards as one with a 26-inch barrel? Will it also handle the short range cartridge as accurately as the rifle with a longer barrel? How long a barrel has the Krag-Jorgenson carbine as used by the U. S. cavalry? I should like to hear from army men on the above as well as from other gun cranks.

H. U. S. Hublard, Los Angeles, Cal.

For the benefit of those who have not tried King's semi-smokeless powder in rifles and revolvers I want to say that this powder is strictly first class. My experience has been chiefly with the .25-20 Winchester single shot and repeating rifles. Have used fg, ffg, and fffg powders. All give good results; but with the finer grained it is best to use a bullet slightly hardened with tin. For the repeater, I prefer the 77 to the 86-grain bullet. The success I have had with the former makes me think it would be good for deer shooting.

A. A. Haines, Armington, Mont.

During '96 and '97 I hunted ducks and quail with a 10-gauge Parker and thought it a good one. In '98 I got a Winchester repeater, which I wouldn't trade for 2 double guns. With it I can kill ducks, from mallards down, at 60 yards, with 3½ drams of powder and 1⅛ ounces of No. 6 shot. I can get 4 out of 6 quails, and they are pretty quick birds in this part of the country.

Harry Clay, Phoenix, Ariz.

I have an Ithaca 12-gauge hammerless gun, No. 2 grade, 28-inch barrels, weighing 6 pounds 13 ounces, and it is the finest gun I ever saw for the money. Its finish and balance are all that could be asked for. I should like to ask through RECREATION what would be the best load to use in it, for ruffed grouse and quail, that would not give too much recoil.

S. A. S., Naples, N. Y.

In answer to Old Subscriber's query in August RECREATION, I will say there are several .30-30 cartridges, and a variety of bullets for same. I would advise him to write to the Ideal Mfg. Co., New Haven, Conn., for a copy of their hand book, in which he will find the desired information and many other useful points for sportsmen. They advertise in RECREATION.

R. E. P., Franklin Falls, N. H.

I have used several different makes of

.22-caliber rifles, with different length cartridges, 3 to 7 grains of powder, and with light and heavy bullets. The Stevens Ideal, No. 44, .22 caliber, made for .22 long rifle cartridges, gives the best results of any I have tried so far. The .22 L. R. is accurate, both for long and short range, and in a Stevens.

Geo. W. Nellis, Dannebrog, Neb.

I think the .44 Winchester the best rifle. It will kill as far in the woods as a man can see, and as far on the water as an ordinary shot can hit anything. I have killed everything from moose down with the .44, and it kills without tearing the animal to pieces.

G. H. Ross, Ahmic Lake, Ont.

Why is the man with a pump shot gun more of a game hog than he with a pump rifle? The average man with a magazine rifle, coming upon a band of deer, will pump his gun dry if the game remains long enough in sight. Would it not be a good idea to forbid the use of all repeating guns?

A. Kennedy, Missoula, Mont.

I have hunted, with many black powder rifles of different calibers and found them far inferior to .30-30 smokeless. The .30-30's I have used did good work, with no smoke and little noise. With the one I am now using I killed 7 deer with 10 shots. Not one of the deer went 15 rods after being hit.

J. J., Eholt, B. C.

I thank you for the can of Laflin & Rand powder you sent me as premium. For velocity, penetration and cleanliness it surpasses any powder I have ever shot. Hope to send you some more subscriptions in a short time.

B. R. Smith, Winston, Mont.

Replying to J. D. N., of New York city: The .30-30 Winchester, '94 model, is all right for big game. This has been proved in the West. A .38 caliber revolver is the best size for all ordinary purposes.

Geo. W. Nellis, Whitehorn, Col.

Will some of RECREATION's many readers please tell me what they think of the Gun Bore Treatment, and how guns so treated stand damp weather.

R. E. P., Franklin Falls, N. H.

I would say to E. I. Oliver, of Blanchester, O., that I consider the Baker hammerless shot gun absolutely safe.

A. Chamness, Gunsmith, Elwood, Ind.

What is the relative accuracy of a .25-20 and a .32-20 Winchester? How accurate are they at 200 yards?

Deerfoot, Denver, Col.

NATURAL HISTORY.

FEATHERED FRIENDS.

In the spring of '65, while hunting squirrels near Columbus, Ohio, my dog flushed a wild hen turkey from a fallen tree top. Near by I found her nest, with 10 eggs. I took them home and set them under an old topknot hen. In 3 weeks the eggs hatched.

Sitting in the barn one day, I heard a peeping upstairs and hurried up to see the young birds. When I reached the mow the old hen was running about with her wings spread, clucking and making desperate efforts to gather her foster children. They were all hidden under the hay and still as mice. Procuring a basket, I dug the turkeys out of the hay, caught the hen and placed them all in a pen in the yard, tying the hen with a cord so she could not fly out. At once on being released from the basket, the young turkeys skulked away, trying to hide and running their heads under a leaf or anything to get out of sight. The hen continued to call them, but they paid no attention to her. I left them there 3 days. During that time 3 of them died.

I then concluded to let nature take her course, and turned them loose in an 18-acre meadow. The young turkeys disappeared at once in the grass, with the hen hot after them. She kept on their trail and managed to get them together at night and hover them. The next day I rode into the meadow, and after searching a long time saw the turkeys skulking through the grass, trying to hide, with the hen close behind them, also trying to hide. I made weekly visits to the meadow, always finding them in hiding. They lived on grasshoppers, etc., but were never fat. After the grass was cut they used the whole farm, and never came near the barn until late in the fall. Then they came and roosted on a rail fence. During the summer owls killed 3 of them. I selected the largest gobbler of the 4 remaining turkeys and kept him to cross with tame turkeys the following spring. However, I failed to get the cross.

At that time, being a year old, the young gobbler began to feel his importance, and strutted around the poultry yard, seemingly bent on convincing the roosters that he was cock of the walk. This was disputed by an old Dominick, and the battle resulted in the defeat of the gobbler. Next day they fought again. That time the rooster was knocked out by a blow in the solar plexus. They kept that up all summer, first one getting licked, then the other.

In the fall, to my great surprise, they buried the hatchet, becoming fast friends and objecting to being separated. They left the flock of poultry, and roamed the farm together, roosting side by side in the barn. Often they would sit in the shade, the rooster under the breast of the turkey, with their heads close together. If disturbed by any other rooster, they both went for him and laid him out.

Late in the fall I gave the rooster to a colored man who lived $\frac{1}{2}$ mile away, across a deep ravine. When liberated the next morning the rooster flew up on a rail fence and crowed loud and long. The turkey heard it and stretched his neck high, looking in all directions and crying "Quit! quit!" Again the rooster crowed, and the turkey, locating the sound, flew across the ravine and struck a bee line for his friend, who still sat on the fence, crowing. As soon as the turkey arrived, the rooster joined him and they seemed overjoyed to meet again. We attempted to drive the turkey home, but failed. At night I caught the turkey and carried him home. Next morning the rooster crowed again, and the turkey joined him as before. This continued until the death of the rooster was decided on, and he was killed. The turkey wandered around for several days, calling and apparently mourning for his lost companion.

R. H. Patterson, Chicago, Ill.

THE EUROPEAN HEDGEHOG.

One of the most interesting animals I met while on a collecting trip in Sweden, in the interest of the National Museum, was the European hedgehog, *Erinaceus europeus*, and I had an excellent opportunity to study its habits.

It seems to prefer the open country in the vicinity of habitations, where it spends the day in hedges, gardens, clumps of weeds, or under buildings. As night approaches, it leaves its hiding place in quest of food. Although classed as an insectivorous animal, it is not strictly so, being in fact omnivorous. One of the first places it visits is the kitchen door, where it searches for scraps thrown out. Then it is off to the meadow or garden in quest of insects, worms or mice, but it is too slow to catch many of the latter. It will devour pieces of meat and the dead bodies of small animals.

While on these excursions it moves slowly, examines everything it comes to, and frequently pauses to listen. When frightened, it starts off at a quick trot until overtaken, and, should an attempt

be made to pick it up, it rolls up in a ball, with its spines pointing in every direction. If placed on the ground on its back it is in no hurry to unroll. In a few minutes, however, the quills begin to separate, and you see a little nose and 4 feet protruding from the center of the ball. As it becomes more confident, the ball opens, the little animal scrambles to its feet and resumes the hunt for its daily bread.

The hedgehog's quills are his most formidable weapon in resisting enemies other than individuals of his kind, for although I handled and tantalized many, they rarely attempted to bite. Unlike our porcupine, the European hedgehog does not shed his quills. On skinning several, I found a layer of muscular tissue attached to the skin. This thickens abruptly into a band of muscles on the sides, head and abdomen beneath the roots of the quills, thus forming a puckering string, so to speak, with which the animal draws himself into a ball. They are easily trapped. I secured all I wanted by catching them in my hands during evening walks, and was obliged to go through the disagreeable operation of killing them. They are slow to see danger; many times I have gone within a few feet of them without being discovered. I held 6 captive more than a week. They were kept in a screen cage, placed on the ground. During the day they slept, but as night approached they became active, and would scramble up the sides of the cage as far as their short hind legs would permit, in their attempts to escape. They seemed totally unable to climb; and it was nearly a week before they made an attempt to escape by digging, and then they succeeded only in scratching a slight hollow. On a floor their tread is heavy,—but on the ground it is scarcely audible.

J. A. Loring.

A WEIRD SURVIVAL.

Union, Ore.

Editor RECREATION: While hunting for the Denver market, in the winter of 1861, I came across and killed the strangest animal I ever saw. I was making my way through a ravine toward a small band of antelope which I had seen near the head of the gulch before I entered it. When I thought I had reached a point opposite the antelope, I crept cautiously up and looked around. My game had disappeared; not an antelope was in sight. As I stood pondering on the vicissitudes of the hunter's life, my attention was attracted to my right. Looking in that direction I saw a strange animal passing on a good, round trot, not over 10 rods away.

Evidently he had not seen me, or if he had he paid no attention, but kept his nose

pointed straight ahead, and neither looked to the right nor left. I drew a bead on him and fired. At the report he changed ends and died with scarcely a struggle.

He was undoubtedly a member of the canine family, though of a species unknown to me. He would weigh about 100 pounds; stood very high at the shoulders and low at the hips; legs rather short, strong and muscular; hind legs crooked; heavy, reddish brown mane on neck and shoulders; sides bare as a lady's cheek and almost as white and clean; back and belly covered with a thin coat of short, grayish brown hair; color lightest on belly. The tail was almost hairless, except on the end, where there was a bunch of coarse, white hair.

I did not save the skin, nor any part of the animal, which I now regret exceedingly. I was younger then than now, and was naturally careless about such things, not knowing but such animals might be plentiful in that then almost unexplored country. If I had suspected I was sending the last of a race to join the great army of extincts, I would at least have saved the skin.

If any of the many readers of RECREATION have ever seen or heard of an animal such as I have described, I should be pleased to hear from them concerning it. I can stand a reasonable amount of criticism or guying, but if any serious exception is taken to the truth of this story I can refer the doubting ones to Postmaster A. K. Jones, Judge Robert Eaken, I. W. Cromwell, M.D.; D. Y. Deering, M.D., and many other citizens of Union, Ore., who have known me 20 years.

W. F. Davis.

ANSWER.

The animal was probably a coyote, or a grey wolf, disfigured and perhaps deformed by disease.—EDITOR.

BIRD AND ANIMAL CONVENTIONS.

Can any of your readers tell why birds and animals meet in congress, or convention, at certain seasons. It is not for breeding purposes, as it is at the wrong time. The sexes of deer separate at the proper time. I have counted over 60 does in an hour's ride, with not a buck among them, while on another ridge there were many bucks. The grouse family pack, and I think all the raptors do. I have seen many hundreds of quail in one bunch and later they have separated for their respective ranges. Turkeys and crows do the same, the latter just before they leave the region where they were bred; and a noisy congress it is. I have watched them with a fieldglass, from an observatory, but am unable to decide if the ones that ascend a

few feet in the air and gyrate a few times, with a caw, caw caw, are always the same or different ones of the assembly. Some observers say these meetings are criminal courts and the malefactors are being tried; but how one crow can be blacker than another is not apparent. I have noticed they take their departure the next day and leave an odd number behind. Queer, if a crow can't count. They certainly have a language or means of communicating ideas, as is apparent when a hen or a quail gives a lecture to her brood before leaving them to shift for themselves. Bears meet in convention, but manage their affairs with more decorum. I have never seen more than 5 at a gathering, but my brother and other hunters have seen as many as 30. The bears pass around, nose and smell, sit on their posterior joints, look wise and say nothing the observer can hear, as he must of necessity be at some distance. They then separate and each goes his or her way alone. It has been conjectured these meetings are to arrange an apportionment of the country each shall inhabit. Quien sabe?

I have noticed that bears are methodical in their habits, always following their own trail until their tracks are deep depressions in the ground.

On another point I seek knowledge. Why do bears leave their teeth marks across a tree or a sapling, as high as they can reach, standing on hind legs? The highest marks are always the freshest. Is it the same bear that makes the higher mark, to see how much he has grown, or another bear who can go him that much better?

L. Allen, East Wareham, Mass.

CAN MILK SNAKES MILK?

Can the milk snake milk a cow? I have visited regions where this reptile abounds and have been told by farmers that it will fasten itself to the hind leg of a cow and milk her. I have seen this snake around dairies and have heard it will drink milk from pans, but I cannot bring myself to believe in its ability as a milker.

H. L. Nelson, Washington, D. C.

ANSWER.

The milk snake, *Coluber eximius*, is extremely partial to milk and will levy toll in the dairy when opportunity offers. As a set off against such depredation, it is an excellent mouser, and if the snakes are left undisturbed and the milk so protected that they cannot reach it, they are useful. In captivity they drink milk with avidity; for the matter of that, so do other species, the coral snake, *Elaps fulvius*, being one. With regard to the sucking of cows, many people maintain that they do, but they are casual and superficial observers and have

been mistaken. More frequently the statement is from hearsay, or from superstition. The European hedgehog bore the odium of a like accusation for centuries; even now, in some out-of-the-way districts the belief obtains. There is absolutely no reason for entertaining the idea; had it been so, it would long since have been settled in the affirmative. It is a common species and herpetology is a study nowadays. Is it likely that scientists who have devoted long years of study to the habits of snakes would not have chronicled a solitary instance? Snakes have peculiar traits, allowing their young to take refuge down their throats in case of alarm being among the number; but that of sucking cows is not recognized by those fully qualified to judge.

Percy Selous, Greenville, Mich.

THE SISKIN IN MICHIGAN.

The pine siskin, *Spinus pinus*, is strictly a winter resident in this county. It usually arrives in December, and stays until its young are able to fly. In midwinter, in company with the red crossbill, it visits the farm houses, picking up what little it can find near the door. If unmolested it will become so tame as to allow a person to walk within 4 or 5 feet of it. A hemlock stump in our dooryard furnished a peculiar attraction for them, a flock of 8 siskins and 5 crossbills visiting it nearly every day during the winter of 1898-9, picking on its rotten surface for hours. The first sign I saw of nest building was April 10th, 1899, when a pair carried away part of a cedar bird's nest located in a maple shade tree. April 14th they left the nest and began carrying hog hair from a scaffold, near the barn, on which the hogs had been killed. This continued for a few days, when they suddenly stopped coming to the farm house altogether. April 25th, after a long search, I found a nest of one pair, in a hemlock, 20 feet from the ground and 15 feet out on a slender, swinging limb. This nest contained 4 eggs, pale green, lightly spotted with brown. April 27th I found another nest, 35 feet from the ground and 12 feet out on a limb. It also contained 4 eggs. As soon as the young birds were full grown they quietly migrated, probably Northward. Cook, in his "Birds of Michigan," makes no statement at all concerning nesting, and Coues in his "Key" says nothing about the date of nesting. From this it would appear that little is known on this subject.

W. H. Dunham, Kalkaska, Mich.

WRITE YOUR CONGRESSMAN.

All I can do for the cause of game protection is to set a good example to others—

not to shoot or catch any birds or fish I have no use for.

One of the great causes of bird destruction is the indiscriminate collecting of birds and eggs by amateurs. I have seen things done by this class that would put the average plume hunter (on whom be curses) in the light of a pretty good fellow.

You are doing good work and you have a hard task. You should receive the encouragement and practical support of every man and woman interested, and, speaking of women, is it not possible for Congress to pass a law forbidding the sale and wearing of egret plumes, with a heavy penalty of fine and imprisonment. It seems that is the only way. Women are so constituted that nothing but the severest measures will appeal to their understanding. You are in a position to do it. Why not set the ball in motion and see if something can be done.

Newton Dexter, Grant, Fla.

ANSWER

The ball is already in motion. Mr. Lacey has introduced a bill in Congress, known as House bill No. 6,634, which strikes a hard blow at the plume hunters and plume wearers. Let every friend of the birds write his representatives in both houses of Congress urging the passage of this bill. When we get this law then we will ask for other and more stringent ones.—EDITOR.

NATURAL HISTORY NOTES.

Your valuable publication is always read with pleasure from cover to cover and it always contains items of interest to lovers of sport with rod and gun. I note one letter in the December number that I cannot pass without comment. It bears the title "Hunting Muskrats," and it makes me wonder how long people will continue to write of something they know nothing about. No one ever saw a muskrat eat flesh of any kind. He is not a carnivorous animal any more than a rabbit is or a beaver. For instance, who ever heard of a trapper baiting his traps with meat to catch either muskrats, beavers or rabbits? Look at the mouth of a muskrat. Has he any carnivorous teeth? No more than a beaver or a rabbit has. It looks to me as though Mr. Wood should take a few lessons in natural history and not presume so much on the credulity of readers. No muskrat ever dined on duck or responded to the call of one.

Game in Wyoming is not so plentiful as it was 30 years ago, but deer are increasing, owing to our stringent game laws. Trout are plentiful, and the streams are being well stocked under the present system. C. W. Morgareidge, Wolf, Wyo.

Is it not true, as a partial answer to a questioner in RECREATION regarding the advisability of waging a war of extermination against the blue jay, that nature left to herself preserves an economic balance that within certain limits of flexibility is practically perfect, and that human interference is apt to disturb it to an alarming degree? Certainly it would seem that men's efforts to promote the general good should be on well defined scientific lines and always in harmony with natural law. That being so, I cannot help protesting against any suggestion of hostility toward so useful, so beautiful, a bird as the blue jay. When New England is suffering so severely from the ravages of the forest tent caterpillar, of which the blue jay is one of the deadliest foes, such suggestions appear especially ill timed. Also, I must raise my voice against the slandering of the crow, than which the farmer and horticulturist has no more useful friend—albeit generally misunderstood and maligned.

E. W. W., Keene, N. H.

I should like to know the name of a small animal caught near here. The full length, from tip to tip, is 22 inches; the tail alone, 5 inches. The specimen resembles a mink in shape, but is a little heavier in head and legs. The teeth are same as those of the mink. The color of under part of body, and about half of the tail, is pale yellow, with the coarse outer fur on back and neck almost black; dark brown around the eyes; feet, legs and end of tail black.

J. W. D., Hamilton, Mont.

ANSWER.

It is a pine marten, though the color is not regular. The light streaks on head, back and side are unusual.—EDITOR.

You are doing a grand work for the protection of the game and birds.

There are a few ruffed grouse, quail and rabbits here, and it is reported that deer have been seen here. There are also many foxes, which are very troublesome.

Do any of the readers of RECREATION know of an animal that eats skunks? I found the head and one shoulder of one, the other parts having been eaten.

S. F. S., Millville, Mass.

ANSWER.

The great horned owl frequently eats skunks, and on rare occasions a fox will do so.—EDITOR.

In January RECREATION Mr. Locke tells of having shot a female passenger pigeon carrying 2 eggs, one almost ready to be

laid, and the other no larger than a pea. Mr. Locke speaks as if he thought both eggs would have been laid before the bird began to set. Pigeons never lay but one egg in a nest. A pair will usually rear 4 or 5 young in a season, but only one at a time. Rarely a squab and an egg may be found in one nest, but in that case the squab is usually crowded out and falls to the ground.

C. E. Willard, Ashburnham, Mass.

The farmers of this State are in the habit of destroying barn swallows' nests because they make a barn look dirty and untidy; but they have a redeeming feature. I know of a farmer who destroyed their nests every year. Last year he left them in peace, and the result was that he was not troubled by mosquitoes as he had been the years before.

E. H. Wells, Grand Forks, N. Dak.

Much space in RECREATION has been used in denouncing the red squirrel, the English sparrow and the blue jay; but its contributors have overlooked the meanest pest of all—the coney rabbit. It is as

viciously determined in driving away white rabbits as the English sparrow is in chasing song birds.

F. W. Smith, Manchester, N. H.

The third toe of a beaver's hind foot has a double toe nail, the extra one setting edgewise and being very sharp. Will some reader of RECREATION please tell me what it is for? I have heard it is to pick their teeth with and also that it is to pick fleas out of their fur.

S. N. Leek, Jackson, Wyo.

I have bought RECREATION at every opportunity for some years, and it has given me lots of pleasure and instruction. I used to think the more game a man could kill the better luck for him, but I think differently now.

Robert Livermore, Boston, Mass.

What causes the gut on flies to crack, and what is the remedy?

W. M., Brooklyn, N. Y.

Will some fly fisherman please answer?
—EDITOR.

THE LEAGUE OF AMERICAN SPORTSMEN.

OFFICERS OF THE L. A. S.

President, G. O. Shields, 23 W. 24th St., New York.

1st Vice-President, Dr. C. Hart Merriam, Washington, D. C.

2d Vice-President, E. S. Thompson, 144 Fifth Ave., New York.

3d Vice-President, Hon. W. A. Richards, General Land Office, Washington, D. C.

4th Vice-President, W. T. Hornaday, 2969 Decatur Ave., Bedford Park, N. Y.

5th Vice-President, A. A. Anderson, 93 Fifth Ave., New York.

Secretary, Arthur F. Rice, 155 Pennington Ave., Passaic, N. J.

Treasurer, F. S. Hyatt, National Exchange Bank, 90 West Broadway, New York.

General Counsel, Julius H. Seymour, 35 Wall St., New York.

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Dr. David Starr Jordan, Chief Warden, Leland Stanford University.

COLORADO DIVISION.

A. Whitehead, Chief Warden, 17 Bank Block, Denver.

CONNECTICUT DIVISION.

Ralph B. Lawton, Chief Warden, H. C. Went, Sec.-Treas., Bridgeport.

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L. H. Reutinger, Chief Warden, Athens.

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Robert F. Kelly, Chief Warden, Box 188, The Dalles.

PENNSYLVANIA DIVISION.

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Hon. John Sharpe, Chief Warden, Salt Lake City.

VERMONT DIVISION.

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VIRGINIA DIVISION.

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WISCONSIN DIVISION.

James T. Drought, Chief Warden, Milwaukee.

WYOMING DIVISION.

Dr. Frank Dunham, Chief Warden, Lander; H. C. Wadsworth, Sec.-Treas., Lander.

Applications for membership and orders for badges should be addressed to Arthur F. Rice, Secretary, 23 W. 24th St., New York.

LOCAL WARDENS IN NEW YORK.

County.	Name of Warden.	Address.
New York,	Conrad L. Meyer,	46 W. Broadway.
Livingston,	M. De La Vergne,	Lakeville.
Nassau,	Willett Smith,	Freeport, L. I.
Albany,	C. D. Johnson,	Newtonville, N. Y.
Allegany,	J. D. Holden,	Belmont, N. Y.
Broome,	M. A. Baker,	Whitney's Point, N. Y.
Cayuga,	H. M. Haskell,	Weedsport, N. Y.
Cortland,	J. A. Wood,	Cortland, N. Y.
Chemung,	Fred. Uhle,	Hendy Creek, N. Y.
Erie,	E. P. Dorr,	103 D. S. Morgan Building, Buffalo, N. Y.
Essex,	Marvin H. Butler,	Morilla, N. Y.
Franklin,	W. H. Broughton,	Moriah, N. Y.
Montgomery,	Jas. Eccles,	St. Regis Falls.
Oneida,	Charles W. Scharf,	Canajoharie, N. Y.
Orange,	E. J. Breeze,	Forestport, N. Y.
	Wilson Crans,	Middletown, N. Y.
Rensselaer,	J. Hampton Kidd,	Newburgh, N. Y.
Richmond,	Capt. J. B. Taylor,	Rensselaer, N. Y.
	Lewis Morris,	Port Richmond, N. Y.
Schenectady,	J. W. Furnside,	Schenectady, N. Y.
Suffolk,	F. J. Fellows,	Islip, L. I.
	P. F. Tabor,	Orient, L. I.
Tioga,	Geo. Wood,	Owego, N. Y.
Washington,	C. L. Allen,	Sandy Hill, N. Y.
Westchester,	George Poth,	Pleasantville, N. Y.
Essex,	H. E. Braman,	Keene Valley, N. Y.
Rockland,	A. Woodward,	Ramapo, N. Y.
Sullivan,	Ernest W. Kenne,	Mongaup Valley, N. Y.
Dutchess,	A. B. Miller,	Jackson's Corners, N. Y.
Columbia,		Sanataria Springs, N. Y.
Broome,	John Sullivan,	Sanataria Springs, N. Y.
Orange,	Thomas Harris,	Port Jervis, N. Y.
St. Lawrence,	J. W. Aitchison,	Madrid, N. Y.
Onondaga,	James Lush,	Memphis, N. Y.
Yates,	B. L. Wren,	Penn Yan, N. Y.
Dutchess,	Chas. H. DeLong,	Pawling, N. Y.
Dutchess,	Jacob Tompkins,	Billings, N. Y.
Queens,	Gerard Van Nostrand,	Flushing, L. I.

LOCAL WARDENS IN OHIO.

Stark,	A. Dangeleisen,	Massillon.
Franklin,	Brook L. Terry,	208 Woodward Av., Columbus.
Cuyahoga,	A. W. Hitch,	161 Osborn St., Cleveland.
Clark,	Fred C. Ross,	169 W. Main St., Springfield.

County.	Name of Warden.	Address.
Erie,	David Sutton,	418 Jackson St., Sandusky.
Fulton,	L. C. Berry,	Swanton.
Allen,	S. W. Knisely,	Lima.
Hamilton,	W. C. Rippey,	4465 Eastern Ave. Cincinnati.
Knox,	Grant Phillips,	Mt. Vernon.
Lorain,	T. J. Bates,	Elyria.
Ottawa,	Frank B. Shirley,	Lakeside.
Muskingum,	Frank D. Abell,	Zanesville.
Scioto,	J. F. Kelley,	Portsmouth.
Highland,	James G. Lyle,	Hillsboro.

LOCAL WARDENS IN CONNECTICUT.

Fairfield,	George B. Bliss,	2 Park Row, Stamford, Ct.
	Harvey C. Went,	11 Park St., Bridgeport, Ct.
Hartford,	Abbott C. Collins,	783 Main Street, Hartford, Ct.
(County Warden, care Conn. Mutual Life Ins. Co.)		
Litchfield,	Dr. H. L. Ross,	P. O. Box 100, Canaan, Ct.
New Haven,	Wilbur E. Beach,	318 Chapel Street, New Haven, Ct.

LOCAL WARDENS IN NEW JERSEY.

Mercer,	Jos. Ashmore,	124 Taylor St., Trenton
Middlesex,	D. W. Clark,	New Brunswick.
Morris,	Joseph Pellet,	Pompton Plains.
Morris,	Chas. W. Blake,	Dover.
Morris,	Francis E. Cook,	Butler.
Passaic,	L. M. Lefevre,	Pompton Plains.
Somerset,	G. E. Morris,	Somerville.
Sussex,	Isaac D. Williams,	Branchville.
Union,	A. H. Miller,	Cranford.
	C. M. Hawkins,	Roselle.
Warren,	{ Jacob Young,	{ Phillipsburg.
	{ Reuben Warner,	

LOCAL WARDENS IN PENNSYLVANIA.

Venango,	G. D. Benedict,	Pleasantville.
Northumberland,	W. A. Reppard,	Shamokin.
Potter,	Byron Bassett,	Coudersport.
Crawford,		
(West half)	Jasper Tillotson,	Tillotson.
(East half)	Geo. T. Meyers,	Titusville.
Cambria,	W. H. Lambert,	720 Coleman Ave., Johnstown.
Beaver,	N. H. Covert,	Beaver Falls.
McKean,	C. A. Duke,	Duke Center.

LOCAL WARDENS IN MICHIGAN.

Kalkaska,	W. H. Dunham,	Kalkaska.
Kalamazoo,	C. E. Miller,	Augusta.
Sanilac,	W. D. Young,	Deckerville.

LOCAL WARDENS IN VIRGINIA.

Mecklenburg,	J. H. Ogburn,	South Hill.
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LOCAL WARDENS IN VERMONT.

Mecklenburg,	J. H. Ogburn,	South Hill.
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LOCAL WARDENS IN WYOMING.

Fremont,	Nelson Yarnall,	Dubois.
Uinta,	{ S. N. Leak,	{ Jackson.
	{ W. L. Simpson,	
Carbon,	Kirk Dyer,	Medicine Bow.

DISCOUNTS TO LEAGUE MEMBERS.

The following firms have agreed to give members of the L. A. S. a discount of 2 per cent. to 10 per cent. on all goods bought of them. In ordering please give L. A. S. number:

Syracuse Arms Co., Syracuse, N. Y. Guns.
 Davenport Fire Arms Co., Norwich, Conn. Shot guns, rifles.
 Gundlach Optical Co., Rochester, N. Y. Photographic goods.
 Blair Camera Co., Rochester, N. Y. Photographic goods.
 Folmer & Schwing, 271 Canal Street, New York City. Photographic goods.
 The Bostwick Gun and Sporting Goods Co., 1528 Arapahoe St., Denver, Col.

W. H. Langdon, Bridgeport, Conn. Sportsmen's goods.
 New York Condensed Milk Co., 71 Hudson Street, New York City. Condensed products.
 Oneida Community, Kenwood, N. Y. Traps.
 Metz & Schloerb, Oshkosh, Wis. Moccasins, hunting shoes, etc.
 Novelty Cutlery Co., Canton, O. Pocket cutlery, ink erasers, etc.
 Gun Bore Treatment Co., 7 & 9 Warren St., New York City.
 Willis Arms & Cycle Co., Kansas City, Mo. Bicycles, athletic and sportsmen's goods.
 Percy Selous, Greenville, Mich. Naturalist and taxidermist.
 Robt. H. Ingersoll & Bros., 67 Cortlandt St., New York City.
 W. L. Marble, Gladstone, Mich., Safety Pocket Axe.
 Pneumatic Mattress & Cushion Co., Reading, Mass.

WHAT WE DID.

The second annual meeting of The League of American Sportsmen was held at the Hotel Marlborough, in this city, on Wednesday, February 14th, and was an unqualified success.

Eleven States were represented, as follows:

Connecticut, R. B. Lawton, Chief Warden; H. C. Went, Secretary-Treasurer.
 Illinois, G. L. Lehle, Chief Warden.
 Massachusetts, H. S. Fay, Chief Warden.
 Montana, Prof. M. J. Elrod, Chief Warden.
 New Jersey, A. W. Van Saun, Chief Warden; I. V. Dorland, Delegate.
 New York, A. E. Pond, Chief Warden.
 Ohio, L. H. Reutinger, Chief Warden.
 Vermont, W. E. Mack, Chief Warden;
 S. C. White, Delegate.
 Virginia, Franklin Stearns, Chief Warden.
 Washington, J. S. Stangroom, Chief Warden.
 Wyoming, H. E. Wadsworth, Secretary-Treasurer.

The various officers made reports of their work, and of the conditions prevailing in their States, which were exceedingly interesting and instructive. Some of them were highly encouraging, while others were discouraging in their tone; but, on the whole, they were such as to afford great satisfaction to all friends of game protection. There was a tone of sincerity and determination prevailing in all the deliberations of the meeting that is rarely found in any such gathering.

One man had traveled clear across the continent to attend this meeting, and 2 others more than half way across. Various officers had traveled a few hundred miles each, and it was noticeable that all were in the work body and soul, and that they had determined to stay.

Among the more important subjects acted on by the annual meeting were the passing of the following resolutions:

Whereas, the prong horn antelope, one of the most beautiful of American game

animals, is in imminent danger of speedy extermination; and

Whereas, the only remaining specimens of these animals are now found in Montana, Wyoming, North Dakota, South Dakota, Idaho, Colorado and Utah;

Therefore, be it resolved, that the Governors and the Legislatures of these States are hereby respectfully requested and urged to enact laws prohibiting the killing or wounding of antelope at any time within the next 10 years, and that heavy penalties be attached for each violation of such laws.

This resolution called out a very interesting discussion. It was introduced by Mr. Hornaday, who made some impressive remarks on the rapid disappearance and the threatened speedy extermination of the antelope, and the urgent need of stringent measures to prevent its total disappearance within a few years. He was followed by ex-Governor Richards of Wyoming, who is also a vice-president of the League. The Governor said he had not supposed it would be practicable or possible to enact and to enforce a law making a 10 years' close season on antelope; but that on further consideration he thought such a law might work great good. He spoke especially of the difficulty of compelling the Indians to obey such laws and commented on their total and reckless disregard of all laws, either natural or human; of their fondness for killing antelope, deer and elk in the early spring, in order to get the unborn young from the females and eat them. He said that was also the Indians' favorite time for collecting skins to make into buckskin. He said he realized the difficulty of trying to keep the Indians on their reservations and to prevent them from hunting antelope and other game as heretofore.

Mr. Wadsworth, secretary-treasurer of the Wyoming Division, was the next speaker, and said he agreed with Governor Richards as to the difficulty of enforcing such a law, if made. He said he was, however, heartily in favor of the measure and of making the experiment.

Professor M. J. Elrod, Chief Warden of the Montana Division, agreed with the 2 previous speakers, but said that so far as he and his associates on the Montana Fish and Game Commission were concerned they would gladly do everything possible to secure the passage and enforcement of such a law as this memorial asked for.

The resolution was then unanimously adopted, and copies of it have been sent to the Governors and the Secretaries of the States named. It is not yet known how the suggestion will be received in those States, but inasmuch as the New York Zoological Society has adopted a similar resolution asking Wyoming to

pass such a law, it is hoped the Governors and lawmakers of those States will give the matter prompt and careful consideration.

If the States act favorably on this proposition, then a united effort will be made to induce the Secretary of the Interior to adopt more stringent measures than ever before to keep the Indians on their reservations, and to prevent them from killing antelope. If they do persist in violating such a law after being passed, they will be subject to the same penalties as white men. Many of them have already been arrested, confined and imprisoned for breaking fish or game laws, and they will all learn in time that the mandates of the white man, with regard to the preservation of game, must be obeyed.

This resolution, offered by Chief Warden Stearns, was unanimously adopted:

Whereas, The officers of the League of American Sportsmen have seen fit to have the League incorporated under the laws of the State of New York; and,

Whereas, The laws of the State require that in such cases the incorporators shall elect a Board of Trustees, and that these trustees shall elect officers for the ensuing year, and that the incorporators shall adopt a Constitution and By-laws; therefore,

Resolved, That the League of American Sportsmen, in annual meeting assembled, does hereby approve the action of the officers in having the said League incorporated; in adopting a Constitution and By-laws, and in electing a Board of Trustees. It also approves the action of these trustees in electing a board of officers, to serve during 1900, and until their successors shall be elected and qualified.

The following resolution was also adopted:

Resolved, That the thanks of The League of American Sportsmen be and are hereby tendered the Manager of the Hotel Marlborough for his kindness and courtesy in allowing the use of his parlor for the second annual meeting of this League.

During the progress of the meeting a telegram was received from Dr. C. Hart Merriam, of Washington, D. C., 1st Vice-President of the League, stating that his father was dying, and that this would prevent him from attending the meeting, as he had intended. The following reply was sent him by wire:

"Dr. C. Hart Merriam,

"Washington, D. C.

"Your message received. The League of American Sportsmen, in annual meeting assembled, extends to you its heartfelt sympathy.

(Signed.) "G. O. Shields,
"President."

Mr. Hornaday made some interesting

and instructive remarks on the distribution and rapid disappearance of big game, illustrating same with a series of colored maps which Mr. E. S. Thompson had prepared for the purpose.

Secretary Rice spoke on the past, present and future of the League. He gave an interesting retrospect of its growth and of its work, and told the members, in forcible and eloquent words, what they should do in future to insure the most rapid possible growth of the League and provide for the great work ahead of it.

The meeting adjourned *sine die* at 5 o'clock P. M.

A dinner had been tendered the visiting officers, which was given at the rooms of the Aldine Club on the night of the 14th, and to which 54 members and guests sat down. The guest of honor was the Hon. John F. Lacey, member of Congress from Iowa, who is also a member of this League. He came here from Washington, by special invitation of the League, and made the strongest, most eloquent and most interesting speech I ever heard on the subject of game protection. I will not attempt to give even a synopsis of it here, because it is printed in full in this issue.

In the course of Mr. Lacey's remarks he explained the provisions of his bill, No. 6,634, now pending in Congress, which undertakes to prohibit illegal traffic in game through the Interstate Commerce Commission. Mr. Lacey was given a perfect ovation, and he may well feel proud of his membership in this League. On the other hand, the League is honored by having in it a man who commands so much respect and attention in both houses of Congress as Mr. Lacey does. At this writing there seems no doubt that his bill will pass both Houses, and that it will become a law.

The next speaker was Vice-President Richards, who gave a most interesting and delightful account of the famous Race Horse case, which was litigated during Richards's term as Governor of Wyoming.

Race Horse was a Sioux Indian who was arrested for having killed 7 elk during the close season. He was prosecuted in the local courts, and the case was taken to the Supreme Court of the United States, where it was finally decided in favor of the State. Governor Richards's speech will be printed in a later issue of this magazine.

John S. Wise, Arthur F. Rice, Walter D. Edmonds, and others made brief speeches, and the diners arose from the table at 11 o'clock, full of good things, mentally and physically. The dinner, as well as the annual meeting, was an unqualified success, and it is safe to say that few members who were present on either oc-

casion would be willing to miss the next one.

And in this connection, let me state that the third annual meeting of this League will be held on the second Wednesday of February, 1901. Please don't forget it. Please don't write me a year hence that you cannot attend the meeting or the dinner because of a "previous engagement."

L. A. S. WINS IN O. T.

Whit. M. Grant, a well known attorney of Oklahoma City, O. T., and a member of the L. A. S., together with Mr. C. T. Gorton, a local warden, recently seized about 5,000 quails at the railway station in that city, which were consigned to Armour & Co., at Kansas City.

The shipper was arrested and fined \$50 and costs, and the game confiscated. A few days later Mr. Grant seized a second lot of 1,000 quails, also addressed to Armour & Co., and which were in the hands of Wells, Fargo & Co. The name of the shipper did not appear in this case, so Mr. Grant prosecuted the express agent who had charge of the birds, and he was fined \$50 and costs. These latter birds were also confiscated. The evidence showed that they were delivered to the express company by Redfern & Co., of Oklahoma, and this firm will be proceeded against vigorously. The birds were all billed out as eggs. Mr. Grant, in reporting the case, says:

"These shippers have nearly ruined our quail shooting, by getting the birds out of the country, and until these cases came up you could not buy a quail in our local market. Armour & Co. were offering so much better prices for the birds that local dealers would not retail them. It is a disgrace that such firms as Armour & Co. and Redfern will do such business, or will allow their employees to do it. I intend to do all I can to enforce the law here."

In a later report Mr. Grant says:

"Redfern & Co. discharged their manager here, and he lost over \$400 he had invested in game illegally."

This is the kind of stuff many of our L. A. S. members are made of. This one act on the part of a League member should result in our obtaining 500 applications for membership, from Oklahoma and other Southwestern States, within the next 30 days. Let us see how many we shall get on account of it.

The Massachusetts division of the L. A. S. has drafted and presented to the Legislature of that State a bill, limiting the open season for woodcock, ruffed grouse and quail to the months of October and November, and prohibiting the sale of

woodcock or ruffed grouse at all times. This measure is known as House Bill No. 549, and every member of the League and every sportsman in the State of Massachusetts should at once write his representatives and senators urging favorable action thereon.

W. S. Mygrant, director of the 13th Regiment Band, Brooklyn; F. H. Drake, 266 Monroe avenue, Rochester, and Charles H. Seaman, Fishkill, N. Y., have each paid their membership fees 10 years in advance, and are now wearing gold badges which were given them in accordance with instructions from the executive committee. There are 1,000 members in this League who could well afford to do as these men have done. I should be mighty glad to hear from the other 997 within the next 30 days.

The League has had another supply of its muslin posters printed, and friends of game protection everywhere are requested to order these in such numbers as they may be able and willing to post in conspicuous places. This poster announces that the L. A. S. desires to prosecute all violators of the game and fish laws, and offers a reward of \$10 for each conviction secured for such violation. How many posters can you use?

A lot of shooters in Palmer, Mass., recently held a side hunt for sparrows. The rules adopted prohibited the killing of any other bird or animal, and the losing side paid for a dinner for the entire party. Here is an example that it would be well for all sportsmen to follow. The sparrow is driving the other birds out of the towns, and is doing little or no good to balance the account. He should be exterminated, and I should be glad to record a hundred sparrow hunts in RECREATION within the next year.

G. S. Hudson & Son, Ellisburg, N. Y., have made up several new styles of their gun cabinets which will interest all lovers of the gun or the rifle. These new cabinets list at \$15, \$20 and \$35, respectively, and are large, roomy and attractive in proportion to price. You can get circulars showing fine half tone illustrations of the cabinets by writing to G. S. Hudson & Son, Ellisburg, New York, and mentioning RECREATION.

I never knew what true sport was until I commenced reading RECREATION.

Chas. Best, Modena, Wis.

EDITOR'S CORNER.

Webber is out of it. He kept on writing abusive and insulting letters to readers of RECREATION, on government stationery, after having been reprimanded and warned against such action by the Secretary of the Treasury. For a time he used Canadian Pacific Railway paper and envelopes, but apparently exhausted his resources in that direction, and went back to using Uncle Sam's materials. Many of these letters passed from hand to hand until they reached the desk of Secretary Gage in Washington, and now Mr. Webber is looking for another job.

The following letter tells the story officially:

TREASURY DEPARTMENT.

Office of the Secretary.

Division of Appointments.

Washington, D. C., Feb. 17, 1900.

Mr. G. O. Shields,
23 West 24th St.,
New York City.

Sir:—

Replying to your letter of the 13th instant, enclosing a note written by George H. Webber, formerly Deputy Collector and Inspector of Customs at Vancouver, British Columbia, addressed to Doctor George L. Cable, you are informed that as Mr. Webber is now out of the service the Department can take no further action in the matter.

Respectfully,

O. L. Stanton,
Acting Secretary.

A lot of Chicago sportsmen, headed by the veteran ex-game warden, M. R. Bortree, have arranged with the farmers along the Des Plaines river to post their lands and to prohibit all shooting thereon for a term of years. This is a new departure, but a good one. Usually sportsmen dread the sign which says "No trespassing"; but this Des Plaines river country, lying within 10 to 20 miles of Chicago, has been so persistently overrun by ignorant foreigners, who kill every living thing they can find, that the sportsmen have decided it would be better to deny themselves the privilege of shooting there than to allow these vandals to continue their destructive work. Thus an effort is being made to make the strip of timber and the swamps along the Des Plaines a game preserve, and I trust my friends may be eminently successful.

The A. D. G. H. prints, without comment, in its issue of January 27th, this letter from Currituck, N. C.:

We have had a cold snap at Currituck, lasting about ten days, which gave us some good sport in the beginning of it; but the birds soon became so thin that we had to give it up for a few days. One of the old Palmer Island Club members shot 162 geese in one day. This is the largest bag I ever heard of at Currituck. This club, founded some thirty years ago by Capt. Nat Palmer, have given up their lease and will disband at the end of the season.

Any real sportsmen's journal, if it published such a thing as this, would also have printed an editorial in condemnation of such slaughter, but the A. D. G. H. is not one of that kind.

Please study the Official Directory of the L. A. S., printed on pages 307-309 of this issue. Note how it grows from month to month. Where you see that a Secretary-Treasurer has been appointed for any division it means that the membership of that division exceeds 50. Where you see the name of a Vice-Warden announced, it means that that division has over 100 members. The L. A. S. is growing steadily, and will have 5,000 members before the end of this year. It should have 20,000, but many sportsmen are slow to do their duty. They will all come into line in time.

A. E. Pond, Chief Warden of the New York Division of The League of American Sportsmen, has donated to the New York Zoological Park 5 wild turkeys that have been credited to the RECREATION group. There is still lots of room in the park for this group to expand. Who will be the next to push it along?

A remarkable album for holding amateur photos was recently made by the Buechner Mfg. Co., of Battle Creek, Mich. It was of solid coin silver, and was made to order for a member of the Vanderbilt family. The price was \$2,500. This is probably the costliest album ever made. As the Buechner Co. also makes albums at prices ranging down to 75 cents, it will be readily seen that their line is extensive, and no "snap shot" fiend need be without an album.

RECREATION is the best sportmen's magazine published, and it is a great pleasure to me to read it. I heartily endorse your crusade against the game hogs. I was one of them in days gone by, but you may put me down now as a hog butcher. Thanks to RECREATION for so much good work.

C. V. Miller, Humboldt, Ia.

PUBLISHER'S NOTES.

NEW CARS ON THE GRAND TRUNK.

This railway has added 5 handsome new coaches to its already elaborate equipment. During the past year some 50 of these modern cars have been built and placed in service, taking the place of some of the older coaches. Everything that science, experience and skilled labor can do has been done to make these new cars perfect in every respect. In completeness of detail, artistic workmanship, appointments and finish they surpass anything of their kind yet built in America, and, in fact, it would be hard to equal them in the world.

The cars are equipped with Westinghouse quick action triple brakes and air signals. A special feature of the cars is the platform, which is built of steel, and an adjustable covering is arranged over the steps, making the whole platform a vestibule. By this means dust is excluded, and perfect safety to passengers on the platform is assured. The vestibule is also lighted with a powerful light, which though unusual is a most convenient appointment.

The interiors are finished in quartered oak; the seats are Grand Trunk standard reversible pattern, upholstered in crimson plush. A smoking room with a seating capacity for 8 passengers is provided. The aisles of the cars are carpeted with Brussels, and linoleum covers the floor in the smoking compartment. In fact, the tout ensemble of these handsome coaches is one of elegance, and everything about them wears an air of ease and comfort.

BOILED DOWN FOOD.

All sportsmen should know there is in Passaic, N. J., a company that prepares a compressed food. This I consider the best preparation for campers that I have ever tried. It consists of beef, bacon and cereals, properly seasoned, pressed in tablets and put up in sealed cans. A tablet of sweetened tea is placed in each box. The preparation will keep indefinitely. It can be eaten in the tablet form, as you sit in the saddle, or as you walk, or it may be boiled a few minutes in water, when it forms a rich porridge that is not only nourishing, but palatable to a high degree.

I would not go on any camping trip without a good supply of this emergency ration. The company is working day and night on large government orders, for

troops in the Philippines, and for the British troops in Africa. Samples of this food can be secured by addressing the American Compressed Food Co., Passaic, N. J.

I have just returned from a week's trip to Currituck, N. C., duck hunting, and it was hunting sure enough. Was induced to make the trip on the statement that shooting was good there. I got one duck, and am now very sensitive to any allusion to bunco games.

Perhaps it would be well for RECREATION to hint that there is a limit to the number of times a shooter can be bled, in endeavoring to find a good day's shooting on ducks.

Dr. A. S. Pruden, Paterson, N. J.

THE ALBANY GATEWAY.

The New York Central is distributing a large map folder throughout the country which has a striking reference to Albany and its magnificent geographical and commercial position. The principal feature is a page illustration of an open gate, overlooking the Hudson River, with the four tracks of the New York Central in the foreground; the magnificent steamer Albany, of the Day Line, in the center, and the capitol, with a glimpse of the city, in the distance. Over this gate are these words: "The Albany Gateway Always Open." Underneath the picture are these lines: "Through this open door passes the commerce of a nation, over the New York Central lines, the Erie Canal and the historic Hudson River."

On the opposite page is brief reference to Albany as the capital of the Empire State, and one of the most interesting cities in America.

It also refers to the capitol building as one that is set upon a hill and as the most costly building on this continent.—From the Albany Evening Journal.

HERE IS A LETTER FROM A WELL KNOWN ADVERTISER THAT CONTAINS A LOT OF FOOD FOR REFLECTION.

New York, January 20, 1900.

Mr. G. O. Shields, Editor and Manager RECREATION.

Dear Sir: In posting our books we find we received 2,412 inquiries for catalogues last year that mentioned RECREA-

TION. Here is an accurate list, showing the number received each month:

January	255
February	283
March	322
April	199
May	182
June	168
July	206
August	211
September	146
October	147
November	161
December	132

Total2,412

Straws show which way the wind blows, and here is a bunch of straws from which we have thrashed out a very satisfactory bunch of wheat. Yours truly,

D. T. Abercrombie & Co., 36 South St.

My subscription receipts for January, 1899, were..... \$2,968
My subscription receipts for January, 1900, were..... 3,205

A gain of \$237
The news company's order for January, 1899, was..... 17,000
The news company's order for January, 1900, was..... 19,000

A gain of 2,000
See reproductions of these 2 orders on page xlii of this issue of RECREATION.

This does not look exactly as if my crusade against the game hogs was destroying my circulation, does it?

The Teton Guides' Association, although organized only one year ago, had 20 guides in the mountains last season, hunting and guiding. They gave entire satisfaction, and can with pleasure refer parties to any sportsman they had out. The game is wintering unusually well. With the splendid protection given by the game wardens there will be no loss whatever, insuring plenty of game for next season.

Mr. E. C. Benford, of Johstown, Pa., has sent in 200 subscriptions to RECREATION, and has received, as a premium, a Wing Piano, listed at \$750. Any advertiser can see these 200 names on my subscription list, if he cares to call here.

"Augustus Van Sassifras Biltworthy was panting heavily," read Farmer Hayrick, from the latest dime novel.

"Wait a minute," said Mrs. Hayrick. "I reckon that means he had on his winter pants, doesn't it?"

RECREATION is doing a grand work. I hope some time to have the pleasure of meeting you personally.

William D. Jenkins,
[Secretary of State,]
Olympia, Washington.

PURE AND IMPURE FOODS.

"What a Man Eats He Is."

Edited by C. F. LANGWORTHY, PH. D.

Author of "On Citraconic, Itaconic and Mesaconic Acids," "Fish as Food," etc.

FOOD VALUE OF EGGS.

Eggs are generally regarded as a valuable and nutritious food. According to a large number of American analyses, an egg on an average weighs 2 ounces and has the following percentage composition: Shell, 10.5; water, 66; protein, 13.1; fat, 9.3, and ash, 0.9. A side of beef contains on an average about the same percentage of protein, but a larger percentage of fat. Eggs belong to the nitrogenous group of foods, and would naturally and quite properly be combined in the diet with materials supplying carbohydrates (sugar and starch), such as cereals, potatoes, etc. An extended study of the physical properties and chemical composition of eggs was re-

cently made at the experiment station at Berkeley, Cal., the chief object being to determine whether there was any basis of fact for the popular opinion that eggs with a brown shell have a higher food value than those with a white shell. The brown-shelled eggs were from Partridge Cochins, dark Brahmas, black Langshans, Wyandottes and barred Plymouth Rocks, and the white-shelled eggs from Brown Leghorns, Buff Leghorns, White Minorcas and Black Minorcas. The size, weight, specific gravity and the ratio to total weight of the shell, yolk and white were determined and found on an average to be practically the same in the brown-shelled and white-shelled eggs, the slight

differences being in favor of the latter. The average composition of the 2 sorts of eggs was as follows:

Analyses of brown-shelled and white-shelled eggs.

	Water.	Protein.	Fat.	Ash.	Shell.	Total.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Brown-shelled eggs:						
Yolk.....	49.59	15.58	33.52	1.04	99.73
White.....	86.60	11.99	.21	.54	99.34
Entire egg.....	65.57	11.84	10.77	.64	10.70	99.52
White-shelled eggs:						
Yolk.....	49.81	15.49	33.34	1.05	99.69
White.....	86.37	12.14	.35	.56	99.42
Entire egg.....	64.79	11.92	11.22	.67	10.92	99.52

The experiments are summarized as follows:

"It has been said by some that the brown eggs are richer than the white ones. This statement is not borne out by a chemical analysis, and the physical examination proves that the main points of superiority, though extremely slight, are possessed by the white eggs. The minute differences that are found between the 2 groups are exceeded by variation between the varieties within the same group.

"We can, therefore, state as a conclusion, both from a chemical and a physical point of view, that there are practically no differences, so far as the food value is concerned, between the white-shelled and brown-shelled eggs."

The value of any food is determined, not

alone by its composition, but also by its digestibility. It is evident that if 2 foods have the same composition, but, owing to physical properties or other cause, the first gives up twice as much material to the body in its passage through the body as the second, it is much more valuable. In connection with other work, the digestibility of eggs was studied at the Minnesota Experiment Station. Experiments were made by means of a pepsin solution to determine the digestibility of eggs cooked under different conditions. Eggs were cooked 3 minutes at 212° F., giving a "soft-boiled" egg, and 5 minutes and 20 minutes at the same temperature. An egg boiled 3 minutes and digested 5 hours in pepsin solution, compared with one boiled 20 minutes and treated in the same way, showed 8.3 per cent. undigested protein in the former, against 4.1 per cent. undigested protein in the latter. Under similar treatment the egg boiled 5 minutes gave 3.9 per cent. undigested protein.

Another trial was then made, in which the eggs were cooked 5 and 10 minutes in water at 180° F. In both of these cases the protein was entirely digested in 5 hours.

These results would indicate that while the method of cooking has some effect on the rate of digestibility, it does not materially affect the total digestibility. The results agree quite closely with those reported some years ago by Rubner, a German investigator, who found that 97.1 of the protein of hard-boiled eggs was digested.

At the Minnesota Experiment Station a digestion experiment was also made with a healthy man in which a very considerable portion of the nitrogenous material and fat of the ration was furnished by eggs, the other foods eaten being potatoes, milk and cream. About 90 per cent. of the total nitrogenous material and 90 per cent. of the fat consumed were digested. In experiments at the University of Tennessee with healthy men on a diet of bread, milk and eggs, from 90 to 95 per cent. each of the protein and fat was digested. The conclusion, therefore, seems warranted that, as shown by composition and digestibility, eggs possess the high nutritive properties which are popularly assigned to them.

For a number of years the United States Department of Agriculture has been carrying on food investigations in different parts of the country. One of the objects was to learn the kinds and quantities of food consumed by persons engaged in various occupations and the relative cost of such foods. Compared with other foods at the usual prices, eggs at 12 cents a dozen were considered a cheap source of nutriment; at

16 cents a dozen they were called fairly expensive, and at 25 cents a dozen and over they were called very expensive.

THE USES OF FOOD IN THE BODY.

Food serves a twofold purpose: It supplies the body with material for building and repairing its tissues and fluids, and serves as fuel for maintaining body temperature and for supplying the energy necessary for muscular work.

The body is like a machine, with food for its fuel. The body differs from a machine, however, in that the fuel, *i. e.*, food, is used to build it as well as to supply it with energy. Further, if the body is supplied with more food than is needed, the excess may be, and often is, stored as reserve material, usually in the form of fat. In the furnace fuel is burned quickly, yielding heat and certain chemical products—carbon dioxide, water vapor and nitrogen. In the body the combustion takes place much more slowly, but in general the final products are the same. The combustion of nitrogen is, however, not so complete as in a furnace. Due allowance is made for this fact in calculations involving the question of the energy which food will furnish.

Food consists of an edible portion and refuse, *i. e.*, bones of meat; shells of oysters, bran of wheat, etc. Although foods are so different in appearance, chemical analysis shows that they are all made up of a comparatively small number of chemical compounds. These are water and the so-called nutrients, protein or nitrogenous materials, fat, carbohydrates and ash, or mineral matter. Familiar examples of protein are lean of meat and fish, white of egg, casein of milk and cheese, and gluten of wheat. Fat is found in fat meats, fish, lard, fat of milk (butter) and oils, such as olive oil. Starches, sugars and woody fiber or cellulose form the bulk of the carbohydrates.

The protein, fats and carbohydrates are all organic substances; that is, they can be burned with the formation of various gases, chiefly carbon dioxide and water leaving no solid residue. The mineral matters will not burn and are left behind when a material is ignited. By analysis the nutrients have been found to be made up of a comparatively small number of chemical elements in varying combinations. These are nitrogen, carbon, oxygen, hydrogen, phosphorus, sulphur, calcium, magnesium, sodium, potassium, silicon, chlorine, fluorine and iron. Doubtless no single nutrient contains all these elements. The body tissues and fluids contain nitrogen; hence, protein, which alone supplies nitrogen to the body, is a necessary factor in food. All

the nutrients except mineral matter contain carbon, oxygen and hydrogen, and can supply them to the body.

Protein, fat and carbohydrates are all sources of energy. The value of a food for building and repairing the body is shown by its chemical composition; that is, by the quantity of the different nutrients which it contains. Some other means is necessary to show its value as a source of energy. It is known that all energy may be measured in terms of heat. In order to have some measure for expressing the amount of heat, the calorie is taken as a unit. Roughly speaking, this is the amount of heat required to raise the temperature of one pound of water 4° F. One pound of sugar or starch would, if burned and all the heat utilized, raise 1,860 pounds of water 4° in temperature; or it would raise 5 gallons of water from the freezing point to the boiling point, but would not cause it to boil. It has been found by experiment that the fuel value of a pound of protein as ordinarily burned in the body is 1,860 calories; the fuel value of a pound of carbohydrates is the same, while that of a pound of fat is 2¼ times as great.

The value of a food is usually judged by several different standards. Thus it must be digestible and palatable, furnish the nutrients needed by the system in proper amounts, and be reasonably cheap.

FRESH AND SALT WATER FISH.

Fish, using the term broadly, to cover the fresh and salt water animals used as food, is almost universally recognized in one form or another as one of the important food materials, and enters to a greater or less extent into the diet of many if not most American families. Few, however, have any adequate conception of the great importance of the fisheries of the United States and of the immense quantity of nutritive material which is every year taken from the salt and fresh waters of this country. From recent data collected by the United States Fish Commission it appears that more than 616,000,000 pounds of fish, crustaceans, etc., are annually taken from the waters of the New England States, over 596,000,000 pounds from the Middle Atlantic States, over 59,000,000 from the South Atlantic States, 84,000,000 from the Gulf States, 147,000,000 from the Pacific States, and 64,000,000 from Alaska. The products of the fisheries of the Great Lakes exceed 108,000,000 pounds annually, and the interior fisheries 19,000,000 pounds. In the case of such products as clams, scallops and oysters, the weight of the edible portion only has been taken into account. In addition, thousands of pounds of fish

are annually caught by sportsmen, but statistics of the quantity are not yet available.

The total weight of these products, as they leave the hands of the fishermen, is about 1,696,000,000 pounds, representing, as the value of the catch, \$47,180,000. By the processes of canning, salting, smoking and otherwise preserving, the value of the fish is greatly increased.

Of the very large quantity of fish annually placed on the American market, the greater part is consumed at home, although a portion is prepared in various ways for export.

The preference for fresh water or salt water fish is a matter of individual taste. Both are, as far as known, equally wholesome. The value of fish is affected by

various conditions. Among these are the locality from which they come, the season in which they are taken, and the food on which they have grown. In general it may be said that fish from clear, cold or deep water are regarded as preferable to those from shallow or warm water, while fish taken in waters with a rocky or sandy bottom are preferable to those from water with a muddy bottom. Some fish, for instance, shad, are at their best during the spawning season, while others should not be eaten during this period. Those fish which feed on small crustacea and other forms of animal and vegetable life, *i. e.*, their natural food, are preferable to those living upon sewage and other matter which may contaminate the waters.

FORESTRY

EDITED BY DR. B. E. FERNOW,

Director of the New York School of Forestry, Cornell University, assisted by Dr. John C. Gifford, of same institution.

MINNESOTA NATIONAL PARK.

CHARLES CHRISTADORO.

I was very much pleased with the article of Mr. Rice in the February number of *RECREATION*. Had we a few men in the Minnesota Congressional delegation who think as Mr. Rice does, there would be no question of the park project going through to a successful issue.

Those who have stopped to consider the question of a National park in Northern Minnesota, and who have taken the time to look into the proposition and consider it from all points of view, are all favorably inclined toward the undertaking—with one exception, the lumberman.

When this Minnesota National Park project was first made public, the idea of expansion seized the press, and the park advocates were credited with wanting to close up for park purposes 20,000,000 to 40,000,000 acres. At this Duluth protested, and vehemently. As a matter of fact, the park promoters simply wanted the government to withhold from sale and devote to park purposes 600,000 acres of forest and 200,000 acres of water, a parcel of land to-day used for Indian reservation purposes and nothing else, in which no white man now holds title.

Duluth now realizes that this park idea, lined out on such a basis, means future benefit and not detriment to her interests. Only the other day an important meeting of the Development Committee of Duluth

gathered and passed resolutions strongly favoring the park as now outlined. There was but one dissenting vote, and, if I am correctly informed, the party was closely associated with the lumbermen's interests. It is the old story. Duluth primarily opposed the park with all her might and main because she did not understand the proposition correctly. To-day she is beginning to realize what it would mean for Duluth, were steamer after steamer from Buffalo and intermediate points to drop upon her welcoming wharfs thousands of tourists bound for the park, ready and willing to lavish with free and open hand comfortable sums of money on her tradesmen. To-day there are many people who make the lake trip. They reach Duluth, visit such points of interest as exist, and take the night train East or the first returning boat next day. With this park in existence, things would be changed. Duluth would have in her back yard, as it were, a playground for all the world, and one second to none in all America.

The lumber interests in our State are rich and powerful. With them it is, "after us the deluge." Whether posterity will bless them or damn them in connection with this park idea makes to them no difference. The value of that Indian reservation pine in the market to-day is all they see or care about. The pine is going rapidly. The pine barons of the Northwest are already putting millions of dollars into

stumpage on the Pacific coast. Cutting will commence before another 10 years roll around, and shipments will be made to the very markets in which Minnesota and Wisconsin pine is sold to-day. It is true that the cry of wolf has been so often made in regard to there being but a 10 years' supply of pine in the Northwest that people believe it is everlasting. If there were pine in sight for the next 20, 30 or 40 years, why would those already controlling the bulk of the remaining standing pine go to the coast and buy up great tracts of lumber if it could be yet bought in unlimited quantities at home?

Every day pine is growing in value. Prosperity in all lines has affected the lumber market, and rough-sawed lumber in some grades is worth just double what it was a year ago. Is it not a natural sequence that a pine tree in the forests to-day is worth more than it was a year ago?

Nowhere in the United States is there a body of standing white pine of greater value, acre for acre, than that to be found in this Indian reservation. Under the dead and down timber act the lumbermen had in that reservation a veritable gold mine. Those who know whereof they speak come out flatly and state that timber purchased from the Indians on the reservation yielded the Indians about one-tenth its market value. In other words, the dead and down timber act opened a doorway to fraud, robbery and pillage. The lumberman is kept out of that territory to-day because the dead and down timber act has been suspended. The closing up of this region as a park and the gradual economical and scientific cutting of the matured timber, from year to year, forces the man who has fattened under the dead and down timber act into new fields. It is from this very source that all the park opposition is coming. The cry that making a park of this region means the shutting off of so many thousand acres of tillable soil is all nonsense, and the men who make such statements know better.

But recently the owner of the timber around Walker, a small town on the banks of Leech Lake, was preparing to cut some.

The citizens, realizing that the surrounding pine was the only attraction, and that to cut it off meant for all time to come that the village would be simply a graveyard in a desert of sand and stumps, went strenuously to work and prevailed on the timber owner to stay his hand.

And, as a general proposition, this holds good with the entire proposed park area. To-day its pine-clad slopes and valleys are a marvel of beauty to the visiting tourist. It simply needs the saw and the axe to

turn into one vast wilderness of sand, stumps and sloughs a region to-day unexcelled for beauty by any section of the Maine woods or the Adirondacks.

Ten years from now, should the park proposition meanwhile be turned down in Congress, through the influence of Congressmen representing the lumber interests of Minnesota, after the homesteader has gone in, proved up on his timber holdings and promptly turned them over to the lumberman, who, in turn, will leave only stumps, sand and desolation after him, perhaps some park enthusiasts may feel as Mr. Rice feels regarding the Celtic council which stood in cahoots with the trolley company and ordered felled those rows upon rows of ancestral elms.

Every friend of the Minnesota National Park project must understand that the Minnesota delegation in Congress is almost unanimous against it. The influence, politically, of a mere handful of lumbermen is potent enough to compel the representatives of our great State to forestall the park by the introduction of a measure of such a drastic nature as to clean up the whole reservation of its standing pine as fast as the thousands of men can cut it down. When the timber is cleared and the stumps and sand are left, the park advocates may agitate all they please. In fact, they can then have the abandoned land for the defaulted taxes.

In a proposition of this kind it is useless to expect help from the Congressmen of other States, when those of your own State are antagonistic. Therefore, let the readers of *RECREATION* in Minnesota at once bring what pressure they can to bear on their Representatives at Washington. It is now or never. Pine once cut will never be regrown. Once the Nelson bill or a substitute for it goes into effect, farewell Minnesota National Park!

NUT CULTURE.

Although forestry is the art which has to do mainly with the production of wood, there are often many material and immaterial yields which are of more importance than wood production. Agriculture-forestry and arboriculture constantly blend into one another, and, although the raising of trees for nuts is more on the order of orcharding than forestry, it is often quite proper to combine the 2, especially in woodlots on the farm. Just as the sugar maple orchard supplies sugar, fuel wood and pasture, so can the nut orchard supply nuts, fuel wood and pasture. In fact, long ago in Europe the value of a forest was rated by the number of swine it would support. I remember last year, while stop-

ping at a little hotel in Rothenbuch, in the Spessart, in Germany, I was awakened very early in the morning by peculiar noises in the streets. They were due to hundreds of swine which were being driven by the swineherds into the forest to feed on the mast.

The Italian farmer practises a peculiar combination of agriculture and arboriculture. His fields are divided into narrow strips by rows of trees and vines. These strips he sows in grain, while the trees yield him fuel wood, olives, nuts, leaves for silk worms and leaves for fodder for his donkeys; and when they become so large that they interfere too much with his crops between the rows he digs them and and saws them into boards by hand. His field yields a great variety of materials, and, although there are few forests, the country is covered with orchard trees in the agricultural districts.

The Italian knows well the value of the chestnut. From it he makes bread, besides other delicious forms of food. Chestnuts are shipped from Italy in immense quantities to all parts of Europe. Besides yielding an excellent food material, which, if properly prepared, is equal to any of our vegetables, the wood of the chestnut is much more valuable than we have heretofore supposed. A few years ago it was extensively and almost exclusively used for fence posts and rails. Farmers spent most of their winters working out chestnut fence materials. To-day it is considered one of our finest woods for interior finish, furniture, etc. It is quite as beautiful as oak, but lighter and easier to work. It grows rapidly, produces a rank, healthy coppice, and is easily propagated. It would be difficult to find another tree with so many virtues.

Another excellent nut tree, which is quite equal to the chestnut in many respects, although slower in its development, is the black walnut. An excellent place for this tree and the shellbark hickory is in pastures on river bottoms. Here they furnish shade to the cattle and horses and yield excellent nuts, which, if of good quality, may be always sold to good advantage.

Many Eastern persons in California, where almonds and English walnuts grow, send to the Eastern States for black walnuts and shellbarks. The wood of both of these trees is excellent in quality. They are easily propagated and grow in good soil much faster than most people think. The seeds of these nuts should be kept mixed with earth throughout the winter, so they will not dry out. They may be planted in a well-drained place in the fall, provided there are no squirrels to molest them.

It is interesting to note how the pecan industry of our South has grown. Many pecan trees have, of course, been planted, but still a large part of the crop comes from the natural growth in Texas and Louisiana.

I am convinced that it is much better to encourage the propagation of such trees as the chestnut, walnut, tulip tree, sugar maple, etc., on farms throughout the Eastern United States than conifers. They suffer less from the effects of injurious insects and fire, are better suited to the needs of the ordinary farmer and exert a much better influence on the soil.

WASHINGTON'S NEED OF FORESTRY.

Your forestry department is a good one. We in the West, who have viewed with alarm the wanton destruction of the timber all about us, appreciate this department highly.

The destruction of the forests in Washington is a disgrace to the people of the State. With their usual apathy they let the waste go on unheeded, unchecked, and scoff at the idea of the total destruction of the timber. Many do not realize the situation. Others know and don't care, being satisfied if the coal, the timber, the game and the fish last during their lifetime. In the land of the cork, gum and cinchona trees the people and government fully realize the priceless value of their forests, and carefully protect them. With us it is different; the tree is destroyed and no one dreams of replacing it. The world, at a pinch, could do without the products of Southern forests. We could stopper our jugs with corncocks, live without tutti-frutti, and take the faith cure, instead of quinine, for our malaria; but what possible substitutes could be found for fir, cedar and pine? Yet here we are, burning, blasting and destroying our trees, with no thought for the morrow.

The forest on the lowlands and valleys could be replaced; but a start has not been made yet, and it takes hundreds of years to mature pine, fir or cedar.

On the mountains it is different. The forest once destroyed can not be replaced. The conditions required for the formation of soil are not present. Then, with the disappearance of the forest, the climate changes, the precipitation of moisture from the clouds is checked, the streams run dry, and in place of a fertile, wealthy land the sand dune and the desert will appear.

Agitation will do much with our law-makers; they will respond to public sentiment. Therefore, let each sportsman and patriot become an agitator for the preservation of our forests and game.

J. C. Natrass, New Whatcom, Wash.

THE FOREST AND THE SOIL.

In a mountainous country the rocks are constantly disintegrating and feeding the soil, but in sandy regions—especially those which are cultivated—and forest soils which are subjected to fire, there is a constant loss of nutrient materials from leaching, etc.

Every vegetable covering deposits on the soil organic droppings, which decay and form *humus*. The humification of this material is modified by various circumstances. The droppings from conifers decay much more slowly than those from deciduous trees. Warmth and drainage are also important, but the most important feature is aeration. This aeration is mainly dependent on the fauna of the woods. The more numerous the earthworms and other creatures which loosen the surface soil, the more complete is the ventilation and the more rapid the humification in consequence. The soil is passed through the bodies of the earthworms and is rendered much more friable and fertile by the process. The great aim of the Danish forester is to get his forest soil in such a condition that earthworms thrive, and its effect is soon apparent on the tree growth. It is often the humblest creatures that accomplish the greatest work, and, as was long ago demonstrated by Darwin, the earthworm is by no means the least important.

The Parks and Forestry Committee of the Asheville, N. C., Board of Trade called an interstate meeting at Asheville, which was held November 22d, to form an association and take practical steps for consummating the plan for a great forest preserve in the wild mountain regions of that State. It aimed to bring the matter before Congress, with a popular request for a commission to inquire into the feasibility of a National Southern Park in North Carolina. A large petition was signed, and the committee is assured of the aid of the State representatives and of many influential citizens who have long favored the movement. Its importance to the South and to the nation is claimed to be of the first magnitude. I earnestly hope the movement may be successful.

BEEES AND THE FOREST.

The same might be said of bees, which do an immense amount of good in fertilizing the flowers of many forest trees, thus increasing the quantity of seed, and in consequence the number of trees. It is very noticeable how full of seed basswoods and locust trees are almost every year in the neighborhood of apiaries. The pro-

duction of honey and wax has long been an important forest occupation. During the middle ages the peasants often paid their taxes to the church in the form of honey. The wax was in great demand for candles, and from the honey the monks brewed mead.

"I regard the forest as an heritage, given to us by nature, not for spoil or to devastate, but to be wisely used, reverently honored and carefully maintained. I regard the forest as a gift intrusted to us only for transient care during a short space of time, to surrender to posterity again as unimpaired property, with increased riches and augmented blessings, to pass as a sacred patrimony from generation to generation."
—Baron Ferdinand von Wuehler.

A ROBIN PIE.

IONE G. DANIELS.

(After having been offered a helping of pie made of 18 robins.)

It hath been said by many an one,
"There is nothing new under the sun."
But the phrase has lost its pith to me,
Since yesternight at a Sheldon "tea."

The feast was great, the guests were few,
The edibles choice—and one was new;
So new, it startled an untrained ear
The very name of the dish to hear.

Not since the famous nurse's fake
Of the "four and twenty" blackbird bake,
In all the novelties 'neath the sky,
Had I ever heard of a ROBIN PIE!

'Twas a dish of song! The sweets of
spring,
Smothered and baked in a pastry ring;
Just eighteen notes and thirty-six wings,
Missed from a world of beautiful things!

It may seem small to estimate these
On a planet swarming with birds and trees,
But, if in a flock of sparrows, one
In falling, shadows a sea of sun,
And nothing escapes the Father's eye,
In the blazing spaces of world and sky,

Then am I glad I rev'rently hold
The russet crimson and Roman gold
Of the Robin's breast! Its life and mine,
In touch with Heaven and the life divine!
Sioux City, Ia.

I can scarcely express in words the great pleasure I derive from reading each new number of RECREATION.

Chas. H. Weaver, Bethlehem, Pa.

HAYNER'S PURE WHISKEY

DIRECT FROM DISTILLER
TO CONSUMER.

4 FULL QUARTS

EXPRESS CHARGES PREPAID,

For **\$3.20**

SAVES MIDDLEMEN'S PROFITS,
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SINCE 1866

Hayner's pure double copper distilled Rye Whiskey has been sold to consumers direct from our own distillery, known as "Hayner's Registered Distillery No. 2, Tenth District." No other distillers sell to consumers direct. Those who offer to sell you whiskey in this way are speculators who buy to sell again, by which plan they are compelled to add a profit which you can save by buying from us direct.

We will send four full quarts of Hayner's Seven-Year-Old Double Copper Distilled Rye Whiskey for \$3.20, express prepaid. We ship on approval in plain, sealed boxes, with no marks to indicate contents. When you receive it and test it, if it is not satisfactory return it at our expense and we will return your \$3.20.

Such whiskey as we offer you for \$3.20 cannot be purchased elsewhere for less than \$5.00, and the low price at which we offer it saves you the addition of middlemen's profits, besides you are guaranteed the certainty of pure whiskey absolutely free from adulteration.

REFERENCES:—Third National Bank, any business house in Dayton or Commercial Agencies.

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273-279 WEST FIFTH ST., DAYTON, OHIO.
N. B.—Orders for Ariz., Col., Idaho, Mont., Nev., N. Mex., Ore., Utah, Wash., Wyo., must call for 20 qts. by freight, prepaid.

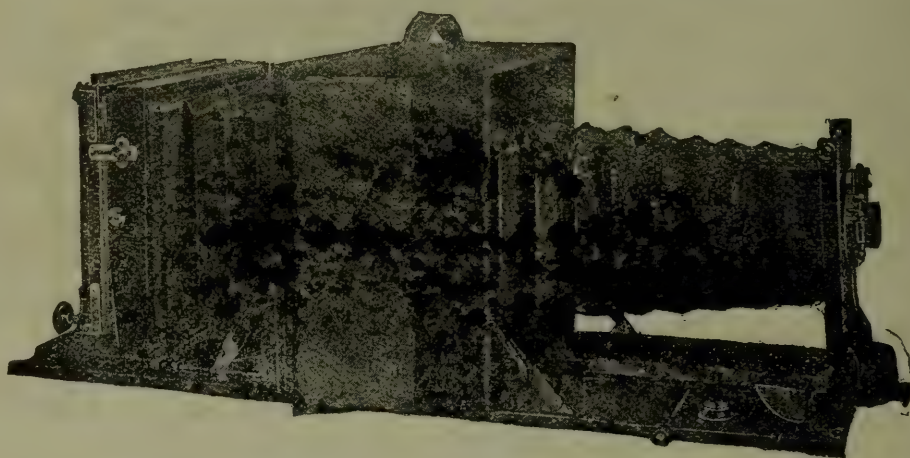
We guarantee the above firm to do as it agrees to.—EDITOR.

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A postal card from you will be appreciated, and will bring whatever information you may desire.

Manhattan Optical Co. of N. Y.

CRESSKILL, N. J.

AMATEUR PHOTOGRAPHY.

"A Bird on the plate is worth 2 in the bag."

AND NOW COMES THE 5TH COMPETITION

RECREATION has conducted 4 amateur photographic competitions, all of which have been eminently successful. A fifth will be held, which, it is believed, will be far more fruitful than any of the others. It will open April 1, 1900, and close September 30, 1900.

List of prizes to be announced later.

Subjects are limited to wild animals, birds, fishes, camp scenes, and to figures or groups of persons, or other animals, representing, in a truthful manner, shooting, fishing, amateur photography, bicycling, sailing, or other form of outdoor or indoor sport or recreation. Awards to be made by 3 judges, none of whom shall be competitors.

Conditions: Contestants must submit 2 mounted prints, either silver, bromide, platinum or carbon, of each subject, which, as well as the negative, shall become the property of RECREATION. The name and address of the sender, and title of picture to be plainly written on back of each print. Daylight, flashlight or electric light pictures admissible. Prize winning photographs to be published in RECREATION, full credit being given in all cases.

Any number of subjects may be submitted.

Pictures that may have been published elsewhere, or that may have been entered in any other competition, not available. No entry fee charged.

Don't let people who pose for you look at the camera. Occupy them in some other way. Many otherwise fine pictures have failed to win in the former competitions because the makers did not heed this warning.

CAMERA NOTES.

GENE S. PORTER.

They came to me in a beautiful little leather case, nested in violet velvet, labelled "Ampliscopes."

"Jewels?" questioned a friend. Aye, jewels indeed! Perfect discs of optical glass, cut and ground to the various shapes required of them to produce the desired effect; and intended, as the derivation implies, to enlarge the view. There are 5 lenses in the set, and they are all to be used with the extension front, double lens, cameras or kodaks, in precisely the same way. Unscrew the back lens, insert the lens wanted next the diaphragm, replace the back lens, and proceed according to instructions sent with each set. No. 1 is a copying and enlarging lens. It produces natural size at 100 feet and enlarges to the extent the bellows is extended beyond that. No. 2 is a wide angle lens. This

shortens the focus and, consequently, gives a wider angle than could be secured without it. No. 3 is a portrait lens. This also reduces the focus of the lens in the camera, and will produce an effect equal to the best portrait lens of its size made. No. 4 is a telephoto lens. This combination produces great results. It is guaranteed to lengthen the focus from 8 to 10 inches and to magnify slightly. Many times last summer an 8-inch additional length of focus would have been worth 3 times the price of the entire set to me. No. 5 is an orthochromatic ray screen. This I have not tested, but it is recommended to correct the lens for the yellow picture taking rays and produce cloud and shade effects superior to those obtained with any similar appliance.

As I quoted from George W. Wallace in December RECREATION, "Be careful not to expect one lens to do everything. For varied work there must be a variety of lenses." This set of ampliscopes fills just this want of the amateur.

A picture is not all in the camera and the plates. The photographer cuts some figure. The successful photographer sometimes travels miles, 2 or 3 times over, to visit the same spot under several different lightings; studies every phase of it diligently; photographs it from 2 or 3 different points; carefully carries the plates home, and, in the solitude and blackness of the work room, with skill compounds chemicals that took hours of labor to prepare; dusts and washes his plates; stands over the developer brush in hand, stopping back clouds, bringing out foreground, working almost breathlessly, with skill and infinite patience, to produce the result he is striving for. Then he washes, fixes and once more washes, hunting for a draught and the warmest possible place to dry, to add a touch more of brilliancy to his plate; polishes the back to a cut glass polish; prints carefully on the finest makes of paper, to different degrees of depth; then once more compounds chemicals, washing, toning and fixing, using to the last extreme care, even in the mounting and drying. Think of the art in selecting and the skill in exposing; the chemical exactitude and the careful work; all the stages in developing and toning when one must decide in a flash, or all that has gone before, or is to follow, is useless. Then in your hour of triumph, when your publisher says "excellent" and your check comes in, to have someone who ought to have common intelligence, glance at your picture and say patronizingly, "Had pretty good luck that time, hadn't you!" If, after I have planned a picture some day, and worked like that to evolve it, some fiend says this thing to me and I rise up and slay him, it will not

be temporary insanity; it will be madness with method in it, and of months' duration.

I advise every amateur who has worked faithfully and studiously one year to try brush development. I make my best brushes by binding together, with rubber bands, 5 or 6 small camel's hair brushes with quill handles. Compound your developer as usual. Set aside a small dish of it at normal full strength. Add to what is left in your tray 2 to 4 ounces of water and take out a second small dish, to which add 2 or 3 drops of your bromide restrainer. You then have your developer in tray as usual, except a little weaker, a small quantity strong in the reducing agent, and a second small dish full strength. Dust plates, wash and swab with cotton as usual, put in tray and cover. Always keep a plate in developer covered as much as possible. When the image on the plate has come up sufficiently so you can see to work, begin with your brushes. Whatever you wish to hold back, to come up slowly, go over carefully with your restrainer. Whatever you wish to bring out prominently and develop fully, develop with a new brush and your full strength developer. Occasionally immerse your plate in tray and run over with brush, to equalize your forces. Then go back to the first and do it over until you have reached the desired result. Proceed with washing and fixing as usual. In this way skies and clouds that would be lost if developed equally with the rest of the plate may be stopped back and saved, while the foreground and object focused on are fully developed. Once brush work is mastered, I do not think any intelligent worker will ever use any other method.

A contemporary inquires, "What becomes of all the pictures we make?" They seem to "take unto themselves wings and fly away." Recently the Deacon brought a friend home and called for pictures. I could not produce 25 I was willing to show, though I have plates and make prints by the hundreds. All I have myself are a few culls that are left when my publishers and friends get through with me. People have no conscience about carrying off an amateur's work, because, forsooth, they are "your own work and don't cost anything." Of course not! Amateurs get their cameras, lenses, plates, paper, cards and chemicals, not to mention that old man of the sea, experience, all for nothing! Add to this that they frequently go one to 500 miles, hire guides to cut a way through forests, and wagons to carry their stuff, risk their lives wading rivers and marshes, and spend hours in nerve-racking work. Then some fiend in the disguise of a friend coolly walks off with their pictures. People would not dream of taking from your

home a picture they knew you had paid 50 cents for at a gallery; but without even an apology they will appropriate one of your own pictures that cost you 10 times that amount, because "You made it yourself and it didn't cost anything." Words fail me! I have been the length of my tether before and I am there again.

The camera department of RECREATION is for camera users, and it is desired to fill it with reliable matter that will benefit them. If the man who begs for "more of the a, b, c, of the work" will write me on what points he wants help, I will gladly cover them. There are so many volumes of even the a, b, c, that I can not strike out blindly, hoping to hit him by accident. I greatly prefer answering special questions to writing on general principles; and the point that will trouble one amateur will be, in all probability, the very one on which 50 others will want light. Therefore, please send in your questions, care of RECREATION.

Charles L. Fair, of San Francisco, has had built, for the purpose of securing adequate reproductions of the Yosemite valley from some of the high points of observation, a camera with a range of 3 to 10 miles. It is guaranteed that a vessel could carry this camera along a coast, 10 miles out at sea, on a clear day, and photograph every detail; or, safely hidden out of sight and range of rifle or cannon, could take every detail of a fort or intrenchments. It is said to pick out the buttons on a soldier's uniform miles out of range of his rifle, or picture the flies on a far distant window.

Did you ever try Farmer's solution to bring out your buried clouds? Where they are on the negative strong enough to see, but not of sufficient density to print until the rest of the picture is burned up, they can be uncovered to exact printing density by using a brush and Farmer's solution.

The Chicago Art Institute and the Society of Amateur Photographers have combined to hold a salon exhibition of pictorial photography. For prospectus, apply to Fred. K. Lawrence, 65 State street, Chicago.

SOME OF MY EXPERIENCES.

G. A. C.

Funny, isn't it? I thought I knew it all, but I don't, as I have just discovered. A friend of mine wished me to photograph a small machine for him. Would I! Well, that's my hobby. So we departed, loaded for an exposure. The machine stood in the shade, and after focusing and drawing the slide, I removed the cap, when, behold! It fell out of my hand and rolled

several feet before it was picked up, handed to me and replaced. Spoiled by over exposure, I thought, so another exposure was made, and to the dark room we went. Thinking that first one was no good, I decided to experiment with a weak pyro developer. To my surprise a perfect negative came out. Why? I venture to say that 75 per cent. of the exposures made to-day are undertimed and developed with too strong a developer. Try it, my amateur friends. Water is the secret. Don't be afraid of water. Use plenty of it and get better results. No charcoal and chalk, but detail, and lots of it where you never had it before. Don't use a lazy man's developer, one solution. Mix your alkali and deoxidizing agents separately and mix a little brains with each. Start development with a solution weak in alkali. If it does not come, add more, slowly. Don't turn in a plug stream to hurry development. Take your time. Get an 8x10 tray and develop 4 4x5's at a time if you think my method too slow. There is no developer like pyro; at least, none I can recommend. Have tried each new one as it was put on the market during the last 10 years. Use pyro according to formula and you will have better results than by using any old thing on all brands of plates.

A novel transparency, differing from the usual black and white, may be made as follows: Take any brand of plate, exposed or not, but not developed; fix it and wash thoroughly; then soak it in a blue print solution, as follows:

I. Citrate of iron and ammonium, 420 grains; water, 6 ounces.

II. Potassium ferricyanide, 360 grains; water, 6 ounces.

Dissolve each separately and keep in dark colored bottles, well corked, and covered with black paper. Soak the plate 5 minutes in equal parts of each, while still wet, and allow it to dry in the dark. Print under a negative, using a mask of black paper to leave a margin or not, as desired. Print deep, as it washes out considerably. The result will be a beautiful transparency. The process cannot be examined, but must be judged according to the density of the negative used.

Don't rush into print with your pet theories and experiments until you have fully mastered them and know what you are talking about. I have read several articles giving methods for producing certain results, and my sympathy goes out to those who attempt to attain the results described. The amateur has troubles of his own, so don't give him anything more to think about unless you are positive of results and give formulæ correctly.

AGAINST THE CAMERA TRUST.

The Independent Photographic Manufacturers' Association, No. 30 Broad street, New York, sends this message to dealers:

We, the undersigned manufacturers of cameras and photographic supplies, being independent of any trust or combination, wish to assure the photographic dealers throughout the country that we are fully prepared by mutual co-operation to protect the real interests of the dealers, and to support them in the maintenance of their independence.

We are prepared also to effectively oppose a coalition having for its ultimate object the concentration into one source of the supply of photographic goods which are necessary to enable the dealer to successfully carry on his business. In the possible formation of such a monopoly lies a danger to the dealer which threatens his most vital interests, and the gravity of which he cannot overestimate.

We believe every dealer is entitled to maintain his independence, and to feel assured that the stability of his business is not a question of the observance of irksome and obnoxious restrictions, and we herewith, collectively and individually, pledge our aid to all dealers who may hold these views in common with us.

We severally manufacture an extensive and thoroughly representative assortment of plate and film cameras, and a complete line of all other photographic apparatus and materials which are in demand by the photographic public. The dealer is, therefore, perfectly safe in asserting his right to buy such articles as he may choose, from any source whatever, and to sell at his discretion, and in the reservation of this right for himself he has our hearty support.

In order to ascertain the extent to which our aid is desired by the trade, we would ask you to sign and return the enclosed form. In the event of our not receiving your signatures, we shall take this to indicate that you do not desire our co-operation.

Should the photographic dealers for any reason be deterred from co-operating with us on these extremely liberal terms, we shall, in justice to ourselves and to those who may be with us, be unwillingly compelled to sell our goods through other agencies.

Aiken & Gleason, La Crosse, Wis.

John Carbutt, Wayne Junction, Philadelphia, Pa.

Charles Cooper & Co., 194 Worth St., New York City.

Defender Photo Supply Co., Commercial St., Rochester, N. Y.

Gundlach Optical Co., Rochester, N. Y.
 Manhattan Optical Co., Cresskill, N. J.
 New York Dry Plate Co., Guttenberg,
 N. J.
 The Adams & Westlake Co., 110 Ontario
 St., Chicago, Ill.
 The Bullard Camera Co., Springfield,
 Mass.
 The J. C. Millen Mfg. Co., Denver, Colo.

The form referred to above is as follows:

I herewith express my approval of the policy adopted by the several companies subscribing to the circular letter of the Independent Photographic Manufacturers' Association of America, dated January 15th, and wish to express my intention of handling such of their products as I may elect, in conjunction with such other products as I may elect, not mentioned therein.

Yours truly,

.....

I should suppose every intelligent dealer in the country would subscribe to such a proposition at once. I can not understand why any sensible man should allow himself to be dictated to by any combination of camera makers. The houses named above make about all the good cameras produced in this country, except the Eastman line, and they are not in the trust, either.—EDITOR.

MAKE PICTURES—NOT SNAP SHOTS.

I note with pleasure the added space in RECREATION devoted to amateur photography, and to me the most interesting department of that excellent magazine. I wish to sound a note of warning to beginners in photography. Don't go out with 2 or 3 plateholders, or a magazine full of plates, and snap at everything that takes your eye. Most of the beginners who, after a few months' experience, throw away their cameras because of the expense and poor returns, do that very thing. They never get a taste of the real pleasure experienced by those who start right. Perhaps you have bought a camera with the idea of catching a lot of snap shots of people, or things, under ridiculous or unusual circumstances. For instance, a traveling man of my acquaintance makes a collection of photos of "good-bys"—ridiculous, pathetic, or otherwise. He bought a kodak, and, when I last saw him, after carrying it several months, he hadn't one good negative. You must learn, as he did, that it is not once in 100 times the light will favor your snap shot; and when it does you may not be at the right angle to catch the interesting features of the scene. Study the capacity of your camera.

Learn to know a good subject for a picture. If you have an ordinary camera, do not try to take long-distance views. You must have an extra long focus attachment for such work. If you think you have found a good view, don't plant your tripod and shoot from your first point of view. Change position; get a look at the scene from different angles. Study your light. If a water view, study its capacity for reflections with a calm surface and proper light. If everything is not favorable pass it by and return when you think it will be right. One or 2 good pictures will give you more pleasure as a reward for a day with your camera than a lot of commonplace things, which you will look at but once and then relegate to a box of kindred subjects.

F. G. Corbin, Waterloo, Ia.

SPOT CAREFULLY.

Few novices realize that if they would learn to spot negatives and prints properly their work would be wonderfully improved. If a dust spot is left on the negative it, of course, makes a corresponding mark on the print. Every hole on the negative should be carefully filled with India ink, opaque or other medium, and every white spot not belonging on the print should be neatly filled with spotting color laid on in light touches with a fine pointed brush. These colors are to be had at supply stores suitable for all tones on Aristo paper. For platinotypes drop black mixed with a little Prussian blue makes the correct tint. Large spots that need filling on prints should never be filled in one dab. It will show. Fill with properly matched color in little touches at a time until the whole spot looks even with the rest of the print. Make it a rule never to fill a spot in one dab when it can be done in 10 or 20. Also remember that if the tint does not exactly match the tint of the photograph the work might as well not have been done. It may encourage many an amateur who has negatives with pinholes or black spots in them, or who occasionally finds a spotty piece of printing paper in a lot, to know that the same trouble is constantly met in the largest galleries, although after a little work has been expended on them the defects are never visible in prints delivered. Hardly a print leaves the professional photographer that is not more or less spotted—painted, in other words. White spots are neatly covered, eyes and eyelashes as well as scant eyebrows, etc., darkened suitably and shadows emphasized, if necessary. Beginners who may not understand the value of this spotting should try to see the work done in a large establishment. The difference between a spotted and an untouched print is quite as pronounced as in

the "before and after" pictures of the hair renewer advertisements.—Exchange.

A STARTLING DEVELOPMENT IN PRINTING.

At a recent meeting of the Croydon Camera Club, Mr. Friese-Greene communicated some remarkable results of investigations with regard to electrically printed images. One most striking experiment reported in the *Amateur Photographer* is as follows: A sheet of white paper was dampened, a stereotype block placed on it, and an electric current passed through the block and paper. On the latter being examined no change whatever was to be seen in the condition of the paper, but evidently it became impressed with a latent image. Treating this as an electrically formed image to be developed with reagents applicable to photographic images, the paper was brushed over with a solution of nitrate of silver (ten-grain bath) the image flashing up of a pale brown color; brushing the brown image over with sulphate of iron it turned to an intense black. Our readers may remember that some time ago we referred to an American forecast of printing methods in the future, one of them being strikingly prophetic of this experiment. It was proposed to place a printed proof, engraving or otherwise, at the end of a pile of cut paper resembling the edition to be worked, and then pass through from head to foot a strong electric current which, at least in the mind of the prophet, was to instantly produce a fac simile of the original on each sheet. The idea was solely that of a dreamer of dreams, but after the discovery related we may well prepare ourselves for some startling application of electricity which shall revolutionize photography.—Exchange.

SNAP SHOTS.

Flash light is just the thing to use for photographing a restless dog, one of those fellows who is always racing around when out of doors or wagging his tail when indoors, where a time exposure must be given or the flashlight used. But I caution all who try this to begin on their own dog and let all work of this sort be confined to that animal. I know a fellow who agreed to make a picture of his girl's dog, and after ineffectual attempts outdoors, resolved to try it at night. The dog, a huge mastiff of none too sweet a temper, was charmingly posed on a chair, a focus obtained, the flash ignited, and—well, that's nearly all my friend knows about it except that it is painful yet and that the camera and his trousers are both at the repair shop. Singularly enough, however, the

holder was not loosened in the fall, and on developing the plate, more out of curiosity to see how far the brute had got than in any hope of getting anything worth keeping, he found he had a firstclass picture of the dog, who had not been so quick as the flash. His girl now sees that the dog is chained in the yard on evenings when my friend is to call, as the mastiff doesn't approve of the engagement.—Exchange.

The sportsman's desire to kill deer is an odd trait in human nature. If his feelings were analyzed it would be found that a large part of his pleasure in tramping through the dense, silent woods is to gain a sight of the glorious creature he hunts. Why at this juncture he should desire to murder it is the psychological mystery. Some say because he wants to prove to his friends by the production of the carcass that he saw it. If this is all, the remedy is easy. Let each hunter carry not a gun but a kodak, and after taking his snap shot retire satisfied. A settler who really wants a piece of fresh meat might kill a deer now and again for purely utilitarian purposes, but the mere sportsman would have just as keen sport with his camera, and, as under this system the deer would multiply wonderfully he would have it thick and fast. A deer in his native haunts is one of the most beautiful sights in nature, and we do not envy the feelings of the man who, for the sake of burning a little powder, blots out forever its life.—Toronto (Ont.) Globe.

I am a camera fiend, and have read half a dozen books on photography, but I have derived more benefit and good help from RECREATION than from all of them. G. S. P. and G. A. C. have helped me wonderfully, especially G. S. P. I have read her articles over and over.

The following is good for developing over-exposed plates:

(1.)

Distilled water	25 oz
Sulphite soda (crystals).....	3 oz
Hydrochinon	1/2 oz
Bromide of potash.....	1/4 oz
Dissolve by warming, and let cool before use.	

(2.)

Water	25 oz
Carbonate soda (crystals).....	6 oz
Mix 1 and 2 equal parts for use. This is the Cramer Company's recipe for producing great contrast and intensity.	

Harry P., Seattle, Wash.

The *Deutsche Photographen-Zeitung* has a note on the preparation of mountants, prompted by the refusal of a photog-

rapher to accept some mounts from which the photographs became detached in burnishing. The fault was in the preparation of the paste. It is usual to rub the starch into a paste with cold water, and then add a certain quantity of boiling water. But a more adhesive paste may be made in the following manner: Rub down 10 parts of starch in 100 parts of water and heat to boiling point; add one part of gelatine, cut as fine as possible, just before boiling. The paste should be freshly prepared each day, but the addition of one part of carbolic acid, stirred up in 10 parts of alcohol, will preserve it for a considerable time.

In September RECREATION the closing paragraph of "How to Use It" (R. B. A. in the English Amateur Photographer) is as follows:

"Almost every amateur loads his camera with slow or medium plates; then goes out and exposes the whole lot in snaps and differently timed exposures. Then he walks the whole lot through the same new, full strength developer, and can't understand what is the matter."

I protest. Move to amend by striking out "almost every amateur" and inserting "occasionally some tyro." "R. B. A." would better look up the definition of "amateur."

A. Neal, Mitchell, Col.

For cleaning lenses, an exchange recommends vegetable pith. For this purpose the medulla of rushes, elders or sunflowers is cut out, the pieces dried, and pasted singly alongside of one another on a piece of cork, whereby a brushlike apparatus is obtained, which is passed over the surface of the lens. For very small lenses, pointed pieces of elder pith are employed. To dip dirty and greasy lenses into oil of turpentine or ether and rub them with a linen rag seems hazardous, because the Canada balsam, with which the lenses are cemented, might become dissolved. It would be better to carefully wipe off the lenses with a soft linen rag dipped in oil of turpentine, etc.

Will some one kindly give me a recipe and directions for making prominent pictures on silk or linen? I am much interested in photography and find in RECREATION more notes of real service to the amateur than in any other magazine.

F. T. Armstrong, Stuart, Iowa.

ANSWER.

Martin's silk solutions are the best in the market. They can be bought of E. & H. T. Anthony & Co., 122 Fifth Ave., New York.

After developing, when the fingers have been alternately in the hypo, alum and developing dish, the finger ends acquire a disagreeable, dry feeling, which is not quickly got rid of. If, however, they are put under the hot water tap, held there as long as possible, and then washed with soap and warm water, all dryness will disappear, leaving the hands as soft as before.

As a support to trim prints on, use an old negative, film side up. The prints will then be cut cleanly and without slipping. After being in use some time a fresh negative will, of course, be required.

Would like to correspond with some amateur photographers.

Geo. W. Harp, Brinley, O.

THE CAMERA GIRL.

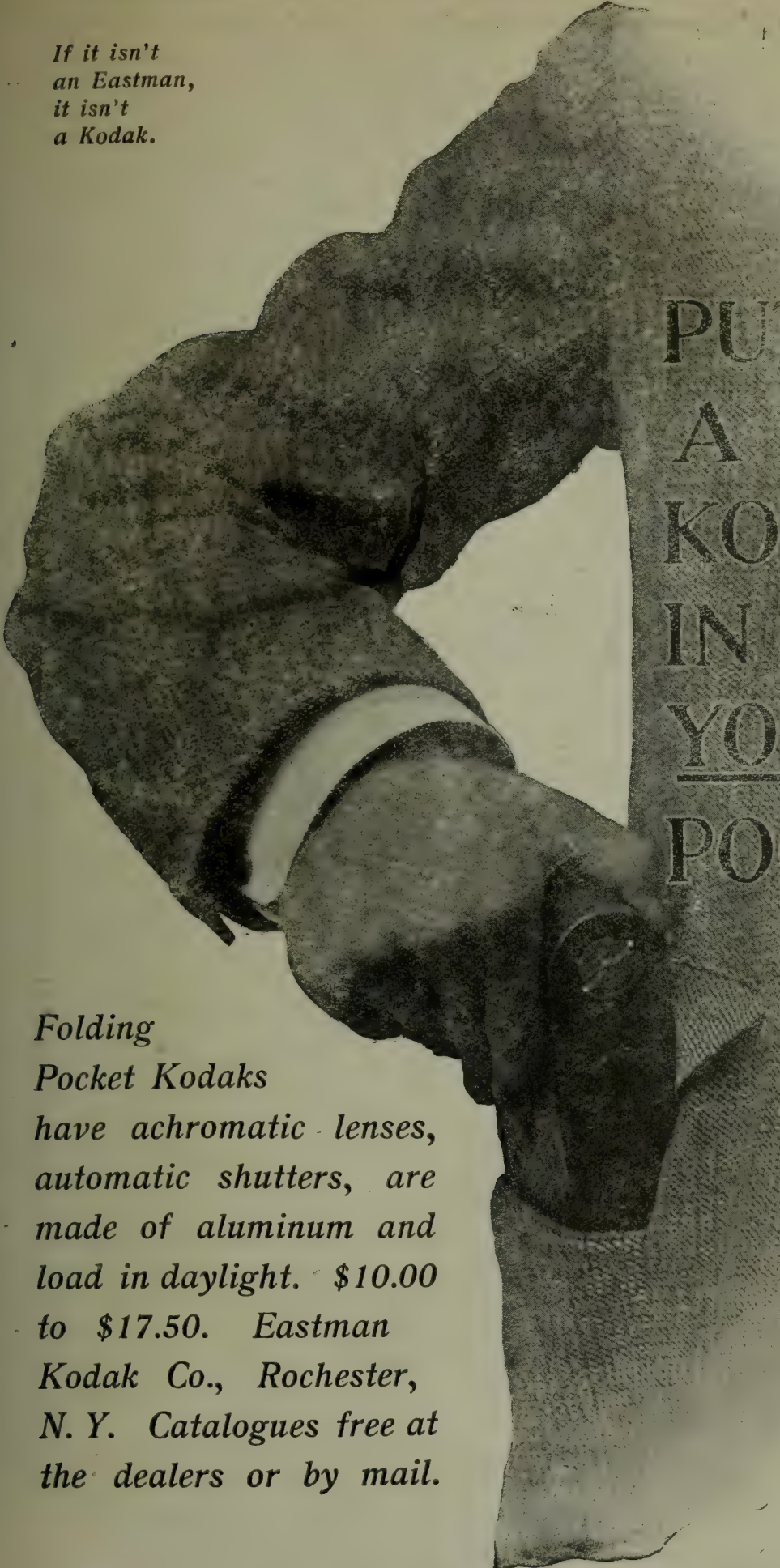
Behold her,
The camera girl,
She comes at the first sign
Of spring, and you can bet she'll stay
Until the depth of winter
Chases her away.
There are girls who row,
And girls who like to wheel,
Or play lawn tennis. Some feel
Disposed toward golf. Now all
Of these, I know,
Are fascinatons in their way,
But I will wager that the camera girl
Can give them cards and spades,
And beat them any day.
Dressed in a shirt waist
And her sailor hat and skirt
Of natty gray, she sallies forth
And snaps and snaps away
At everything of interest that's in sight.
If there's a wedding in the block,
She's there, and she will risk her life
To get a picture of the bride.
If a minstrel show parades the street,
She'll work and elbow through the crowd
Until she stands in front,
And then she opens fire. She'll use
A roll of film in less than no time.
If there's a fire, she's present, and
Her smile's so sweet and bland
That the bluecoats feel obliged
To let her through the lines.
If a man gets hurt, she's there
To take his picture. She feels
So sorry for him, and she thinks
He might feel better if he knew
He had been photographed.

—Detroit Free Press.

Mr. Sweet—Do you find it economical to do your own cooking?

Mrs. Burnem—Oh, yes; my husband doesn't eat half so much as he did when we had a cook.—Tid-Bits.

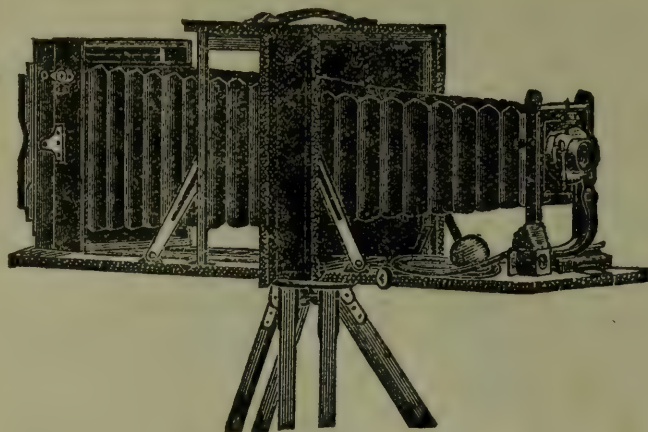
*If it isn't
an Eastman,
it isn't
a Kodak.*

A black and white photograph of a hand holding a Kodak camera. The hand is wearing a dark, textured glove. The camera is a small, dark, rectangular device with a lens and a flash. The background is a light, textured surface.

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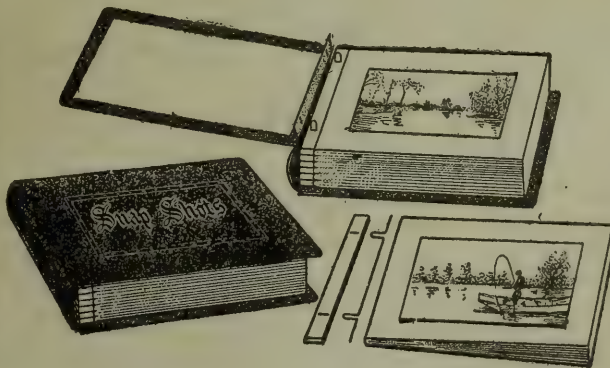
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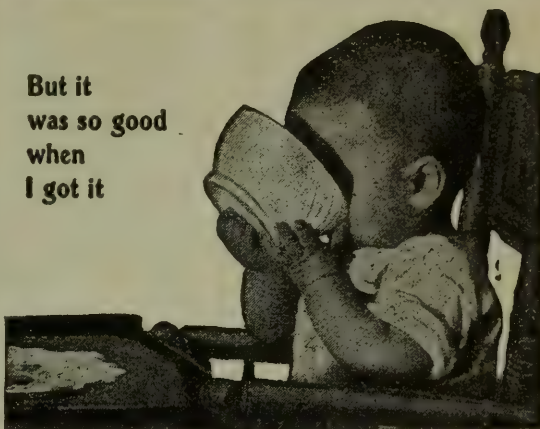
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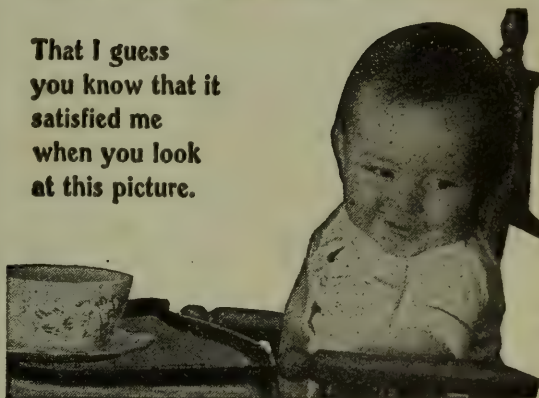
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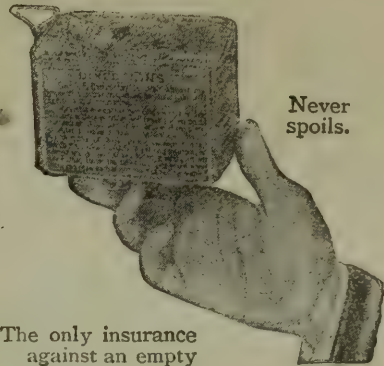
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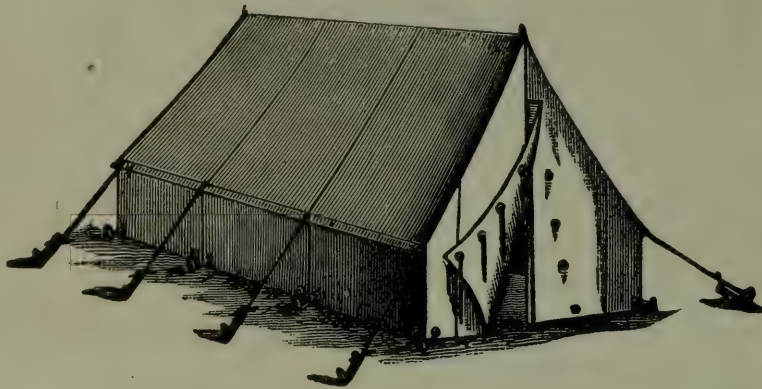
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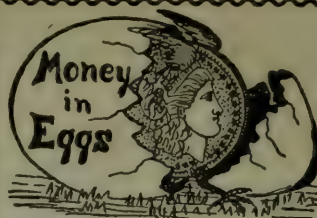
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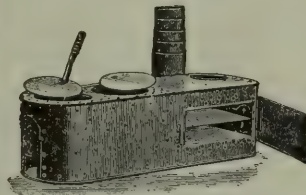
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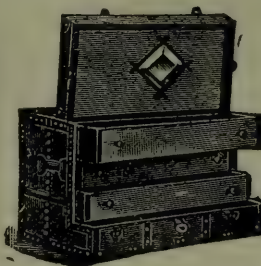
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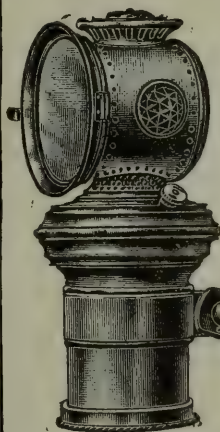
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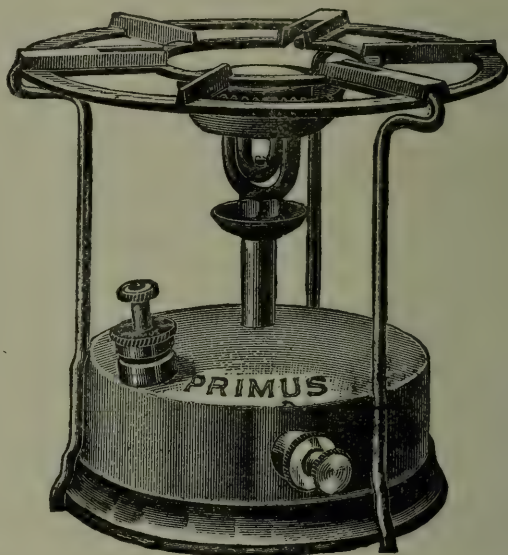
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Emerson's Old 5X Rye the finest whiskey on the market to-day, fourteen years old, smooth, round, and agreeable, devoid of every trace of fusel oil, and aged naturally in charred oak barrels, \$6.00 a gallon; \$18.00 a case of twelve FULL QUARTS.

Bottled Cocktails made with 5X whiskey, \$1.25 per quart.

RECREATION CASE

containing 3 quarts 5X; 3 quarts Manhattan Cocktails;
3 quarts Table Claret; 3 quarts Cabinet Port, \$10.

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Main Entrance to Old Vaults, Washingtonville, N. Y.

The Fishing Season

Is approaching and if your outfit of reels is not complete, here is a chance to complete it **WITHOUT EXPENSE.**

Send me 15 Yearly Subscriptions to
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at One Dollar each and get a

SHAKESPEARE ..REEL..

It is one of the finest pieces of metal work imaginable. It has a traveling guide that distributes the line on the spool evenly and symmetrically without thumbing, and as artistically as a silk thread is wound on the spool in my lady's work basket.

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Sail in and provide yourself with one of the best bits of metallic handiwork you ever looked at.

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You will soon make your preparations for Summer Vacations. Send for a catalogue of Mullins' Metal Boats and study it thoroughly

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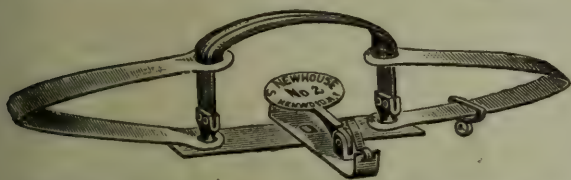
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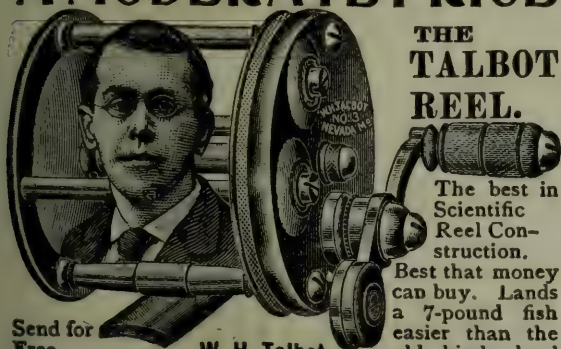
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The best in Scientific Reel Construction.

Best that money can buy. Lands a 7-pound fish easier than the old kinds land a 3-pound.

Send for Free Booklet to

W. H. Talbot, Nevada, Mo.

I do not approve of the use of alcoholic liquors, in general, but recognizing the fact that many good people use them regularly, I deem it only proper to say that the Brotherhood Wine Co., Spring and Washington streets, New York, makes and handles nothing but pure wines and liquors. If you use such on your table, or on your sideboard, I would advise you to correspond with these people. I know them personally, and whatever you may buy of them will be found exactly as represented.—EDITOR.

SMALL PROFITS

QUICK SALES

Trout Flies



FOR TRIAL, SEND

15c for an assorted sample doz. Regular Price, 24 cents.

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Fly Rods 10 feet, 6 ounces

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ANY TACKLE will catch little fish, but the big fellows—well, even the best hook, line and pole can't help you if you use a substitute for the only **real** reel, the

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IT WILL PLEASE HIM A WHOLE YEAR AND HE WILL RISE UP AND CALL YOU BLESSED.

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It traverses the Grandest Scenery of the
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Sportsmen will find in scores of localities
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The map in the "Round the World" folder,
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*For Golfing, Shooting, Hunting,
Riding, Bicycling, Fishing, etc.*

The **Puttee** entirely supersedes leggings and golf stockings, and can be worn over trousers.

The **New Puttee** is so designed as to wind on spirally from ankle to knee, and to fit closely to the leg with even pressure without any turns or twists. **No buttons.**

The **Spat-Puttee** is made to fit any size boot or shoe.

No measurements required.
All wool and water-proofed.
Easily dried or cleansed.

Patent Puttees, \$3 per pair
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TO MANILA,

11,974 MILES.

And the Stars and Stripes affording protection to American Commerce all the way.

See the new "Round the World" folder of the New York Central Lines, just out.

A copy will be sent free, post-paid, on receipt of three cents in stamps, by Geo. H. Daniels, General Passenger Agent, Grand Central Station, New York.

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DAILY FOR

ST. PAUL, MINNEAPOLIS ASHLAND AND DULUTH

REACHING MOST OF THE FAMOUS

FISHING AND HUNTING RESORTS

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IRON MOUNTAIN ROUTE

Is the Line to take from
ST. LOUIS, CAIRO OR MEMPHIS
IF YOU ARE GOING
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THE BEST GAME COUNTRY in the
Mississippi Valley, to-day is
along this Line in

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SMALL GAME is very abundant and has been shot at very little. **DEER** and **TURKEY** are plentiful and the fishing for black bass and other game fishes of the very best. **THIS LINE** also reaches direct from **ST. LOUIS** or **MEMPHIS** by double daily through car service, the famous hunting and fishing grounds of Texas and the Gulf.

For further information write any
Agent of the Company, or

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GENERAL PASSENGER AND TICKET AGENT,
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RECREATION ONE YEAR AND A MEMBERSHIP IN THE L. A. S. ONE YEAR FOR \$1.50. IF YOU ARE A FRIEND OF GAME PROTECTION MAKE THIS OFFER KNOWN TO ALL SPORTSMEN OF YOUR ACQUAINTANCE.

A HIGH-GRADE BICYCLE FOR 50 SUBSCRIPTIONS TO RECREATION

For particulars address this office

I am highly pleased with RECREATION, and shall be a regular subscriber as long as you continue to roast the game hogs.

James A. Long, Tarentum, Pa.

KILL THE SPARROWS.

In February RECREATION, page 135, you name 99 species of birds molested by the English sparrow, and tell the vast number from a single pair in 10 years to be 275,716,083,698. Same number, page 137, Mr. Richard C. McGregor has an article describing damage they do and birds they drive away. I can add my testimony to much there said. In a large elm tree before my front door a pair of robins nested for many years. The last time was 3 years ago. That year one of the robins stood guard over the nest of eggs, and later over the young, every moment, to guard against the sparrows. The robins came no more. In a fine young elm tree beside that one the sparrows ate the tender sprouts, and in early spring, the buds, until they greatly injured the tree. In this locality there are, in winter, no other birds than this most unmitigated pest and nuisance. What harm can there be in poisoning the sparrows? There is no other way of ridding ourselves of them. The injury done to buildings, vines, trees, other birds and crops is something serious. We used to have around my house every spring morning a glorious bird concert. Now we have the twittering of the detestable sparrows. Poison mixed with Indian meal, in dishes set on top of buildings, would be out of the reach of other creatures and could be placed in winter when no other birds were around. I have known of their being cleaned out of a small village in that way. Winter is the time to do it.

You could be of great use to sportsmen, guides and all who hunt if you would urge all, with something of the persistence you show in denouncing game hogs, to know what they are shooting at before they dismiss the cruel lead. Many manslaughters could be prevented. Let it be understood by all hunters that to shoot blindly, without knowing what is behind the moving bush, is a shame not to be lightly overlooked. A man who will do that should be spurned by all sportsmen.

We read of game being killed in many ways, but I have not read of the following. I was driving through a piece of woods when a red squirrel started up, took to the fence and ran a few rods. He wanted to get into the deeper woods on the other side of the road. Finding he could not pass my horse, he left the fence, came straight toward my team, tried to pass under the sleigh, and was killed by being caught under one of the runners.

Carlos L. Smith, Montpelier, Vt.

"So he is going abroad."

"Yes. He got so in the habit of kicking about the way things were done during the Spanish war that he is going to England now to help out the stay-at-homes there."—The Chicago Post.

Cornwall & Jespersen's

Catalogue No. 14

Acquaints Sportsmen with the fact that C. & J. furnish fine quality

Sporting Goods

at very low prices, for instance,



Turned Wing Gut Helper **Trout=Flies**

72 cents per doz., usual price \$1.25



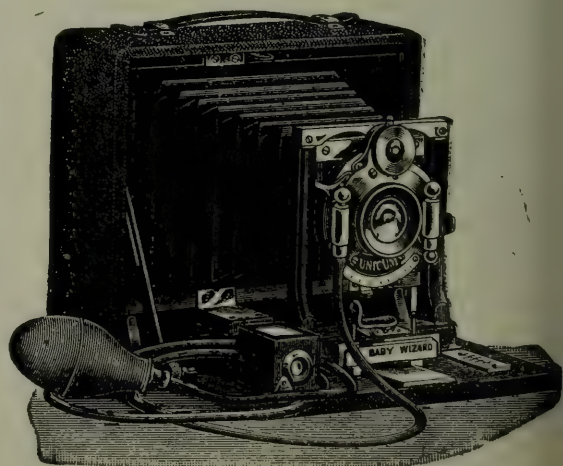
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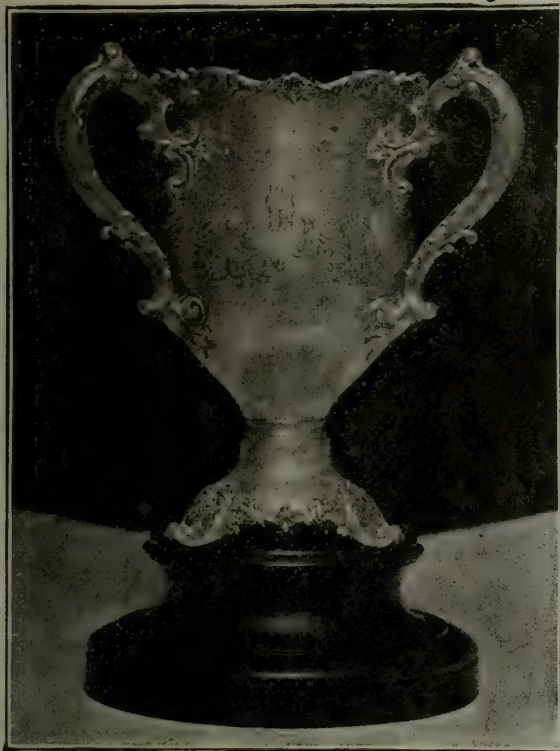
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NEW YORK



THE DEWAR CURLING TROPHY.

This cut represents the silver Loving Cup presented to the National Curling Association of America by John Dewar & Sons, Ltd. (New York Branch), of Perth, Scotland, and London, England. The design of the cup is Louis XV.

It has 3 handles, a capacity of 7 pints, is 15 inches in height, and beautifully engraved with a curling scene in one panel



and appropriate inscriptions in the other 2 panels. The winning teams, each year, will be presented by the same donor with 4 gold medals, and the club to which the winning team is attached will retain possession of the cup during the ensuing year. The trophy must be won 3 consecutive years to become the permanent property of a club. The trophy was made by Theo. B. Starr, of Madison Square, New York.

WHERE SALLIE SLEEPS.

The snow is deep upon the hill,
It spreads across the valley,
And under it, forever still,
Lies our departed Sallie.

Where flowers bloomed, the white drifts
rise.
And bitter winds are sweeping
Across the corner where she lies
So calmly, sweetly sleeping.

Ah, let the wild winds howl to-day,
Let snowdrifts loom around her—
She was a mule and ran away
And broke her neck, confound her!
—Chicago Times-Herald.

OTHERS ARE NOT A
MARKER
TO
B.G.F.
GOLF GOODS
— SPECIALTIES —
FORK SPLICED CLUBS
(PATENTED)
SOCKET CLUBS.
EVERYTHING PERTAINING
TO GOLF.

Write for catalogue with
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JOHN D. DUNN
FREE
THE BRIDGEPORT GUN IMPLEMENT CO.

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Gold Medal Camp Bed

This Camp
Bed has
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adopted
over all

other competitors as the Standard Army Cot for the United States. In 1899 the Government ordered 75,000 cots; on December 18th, 1899, 40,000 more.

Our goods give universal satisfaction. We manufacture Camp Beds, Cots, Stools, Chairs, Settees, etc., also portable folding Bath Tubs, all of which fold compactly. Write us for free catalog. When you know the merits of our Gold Medal line, you will buy no other.

**Gold Medal Camp Furniture
Manufacturing Co.**

RACINE, WIS., U. S. A.

Ye Shakespeare Reel



Yes! the Shakespeare Reel certainly is contagious. Last week I met Judge Parker and his fishing mate, Dick Thompson, our Postmaster, at the big pool below the second dam. As I stepped out of the bushes, the Judge exclaimed, "Now, Dick, that's all 'rot'—I'll bet you anything you like that I can cast as far with my old reel—(I don't know who made it and don't care) as you can with

that Milton, or Byron, or whatever you call that thing of yours." As I came up, Thompson said: "Judge, I'll bet that even Scott here can take my rod and outcast you!" That "even" was not altogether complimentary, but I finally consented to try my hand. I walked out on the breast of the dam, and, after two or three "flukes," made a clean cast that equally amazed his honor and myself. What did he say? Not a blessed word. He quietly took up his bait kettle and rod and started down stream. At the Post Office next morning Dick smiled broadly as he showed me a letter addressed in the Judge's hand to

Wm. Shakespeare, Jr.,
Kalamazoo, Mich., U. S. A.

NO. 2.

THE AUTOMATIC-COMBINATION FISHING REEL.

Winds the line automatically by the action of a spring controlled by the little finger of the hand holding the rod.

**CHANGED INSTANTLY
from Automatic
to Free-Running.**

The
Little
Finger
Does
It.



**NEVER
ANY
SLACK
LINE.**

YAWMAN & ERBE MFG. CO.
Rochester, N. Y.

Send for Catalogue. Dept. X.

A Most Appropriate Present

for your fisherman friend would be a BRISTOL Steel Fishing Rod. Any time at all is the right time to make a present of a fishing rod, for fishermen "live over" their trips; and many a good fish has been caught while sitting by the winter's fireside, with everything "snug" and the old fly-book and tackle spread out on the rug. Write us the style of fishing your friend loves best, and we will help you to select the most suitable pattern from among our 18 different styles.

The Horton Manufacturing Co.

Ask for Cat. "R"

BRISTOL, CONN., U. S. A.

This is the Only Way

People Talk
Who are Using

ITHACA GUNS



Randolph, N. Y., Jan. 1, 1900.

The Ithaca Gun Co.,
Ithaca, N. Y.

Gentlemen:—

The gun which arrived Nov. 29 is more than satisfactory. I made 10 different patterns with it at 35, 40 and 63 yards, with 2 different sized loads, and to say I am pleased with the gun does not half express it. After using it more than a month I am satisfied that the model gun for hunting in this part of the country is right barrel cylinder and left full choke; and if I were going to have another new gun tomorrow it would be an ITHACA, made on the same lines as the one I now own.

Truly yours,

FRED L. SEAGER.

ITHACA GUN CO.

Send for Catalogue.
Mention RECREATION

Ithaca, N. Y.

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DAVENPORT

SOLD

THAN
ANY OTHER
MAKE

SINGLE
GUNS



They have merit, are well made, and shoot well.
Our single shot gun, with AUTOMATIC EJECTOR, is the
most popular gun of this kind on the market.

Send for New Catalogue of Single Guns and Rifles

The W. H. DAVENPORT FIRE ARMS CO., Norwich, Conn.

ANOTHER REPEATER CHAMPION.

The only advantage I can see in a repeating shot gun is that after firing 2 shots you still have 4 more at your command. Theoretically, too, a single barrel should shoot more accurately than a double gun; practically, I doubt if it does. Its advantages are, however, outweighed, except in goose and duck shooting, by its defects. As a brush gun it is clumsy, poorly balanced, heavy and, in my opinion, the second shot cannot be delivered so quickly as with a double barrel. Besides, most double guns offer you the choice of differently bored barrels—one for short and one for long range shooting. I believe, if handled carefully, repeaters are as safe as any guns. I think, also, they will outwear many double guns, especially those of the ejector type. They are not likely to jam, if properly used, and I never knew one to burst. Of all repeaters I prefer the Winchester fore-end action. The usefulness of the repeater as an all around gun depends on the game you hunt and on the size of your "roll." Where ducks and geese were abundant I should choose a repeater. The gun is all right, also, at the trap. But for upland shooting give me a 7-pound double hammerless.

Top Snap, Brockton, Mass.

SOME CURIOUS GUNS.

In January RECREATION I saw J. S. Bennett's article entitled "An Old Timer."

I also have one of the old 7-foot flintlock guns. Mine was made in England prior to 1770, and is no longer serviceable.

In the State Reservation Museum, at Newburg, N. Y., there is a flintlock gun between 8 and 9 feet in length. Though made before 1770, it is in excellent condition. It was presented to the Museum by a colored man, an ex-slave of a New York family. He obtained it as a present from his master.

While in New Orleans, several years ago, I saw, in a small gun shop, a curious swivel gun, made for duck shooting. It was built in France for an old Louisiana planter, at a cost of \$1,500. It had 3 barrels set in triangular shape, 2 barrels forming the base, and one barrel the top. The barrels were 7 feet long and $1\frac{1}{4}$ inch bore. They were mounted on a regular extra large shot gun stock. The gun was fired by one hammer and a percussion cap, all 3 barrels being discharged by one action at the same time. It was held at \$300, and the owner hired it to market hunters at 50 cents a day. It is said the first discharge of the gun killed 500 ducks.

Eug. E. Stokes, Brooklyn, N. Y.



"WALSRODE"

WOLFF & CO

REG. TRADE MARK

WALSRODE

Buy Shells
loaded with
"Walsrode"
Powder

GERMANY

A. C. BAKER N. Y.



CHARLES DALY GUNS

ARE FOR MEN THAT WANT

THE BEST.

SCHOVERLING, DALY & GALES,
302 & 304 Broadway, New York.

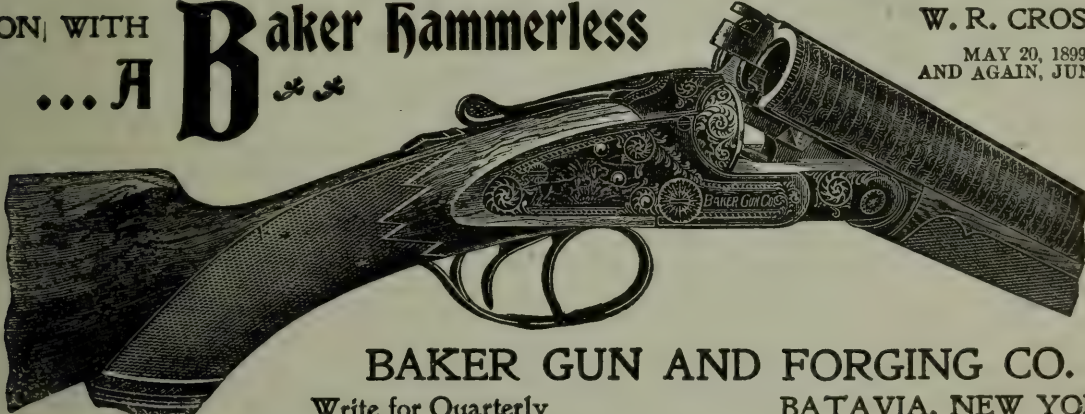
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WON WITH

... **A**

Baker Hammerless



...BY...

W. R. CROSBY

MAY 20, 1899
AND AGAIN, JUNE

BAKER GUN AND FORGING CO.

Write for Quarterly

BATAVIA, NEW YORK

Wing Shooting Made Easy



A new system of sighting shot-guns, so effective that the novice finds but little difficulty in killing the most rapid birds. No sportsman's outfit is complete without a

BARGER SIGHT

(Patent applied for)

It has proved itself a winner and will greatly increase the skill of *any* wing shot. Made of high grade steel, will not mar the finest barrels, can be adjusted or removed in a minute's time and will last a lifetime.

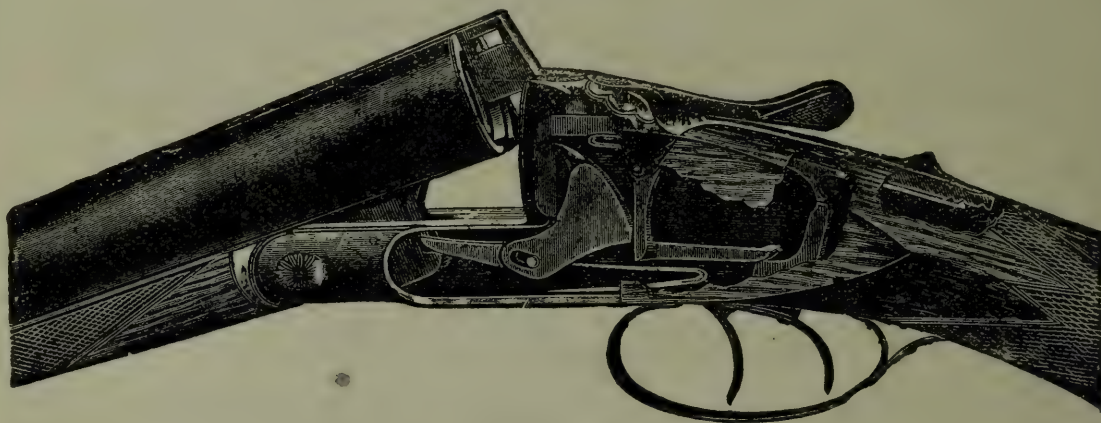
Prepaid to points in the U. S. or Canada for \$1.00. Give bore, length of barrel and whether single or double. Remit by P. O. or Express money order. Circular sent on application.

GRAY & BARGER, 309 Broadway, Room 1314, New York, N. Y.

You Are Not So Many

You can be counted.

But you can't count in four weeks the number of people who are satisfied to use the Syracuse Gun in the field or at the traps. They all tell you this. We tell you to look our guns over. They are hammerless and made in all grades.



Syracuse Hammerless Ejector Guns

Have no competitors. They are without a peer. A simple lock, a strong breech and perfect workmanship assure them of everlasting friendship from all who use them. Write for catalogue.

...MAKERS...

Syracuse Arms Co.

Syracuse, N. Y., U. S. A.

The Old Reliable

"Parker"



Always wins on its merits. Its record for the season of 1899, in all leading tournaments, has never been equalled for phenomenal shooting. Scores ranging from 92% to 99 1-5% made by Amateurs shooting the Parker Gun have been frequent.

Insist upon your dealer supplying a genuine Parker Bros. Gun, and don't be deceived by the statement that any other make is as good.

Send for catalogue.

PARKER BROS., Meriden, Conn.

NEW YORK SALESROOM:

96 Chambers St.

Three jovial travelers were dining together at a hotel, and they agreed that the one who had the oldest name should be exempt from payment.

"My name is Richard Eve," said one. "You must admit that is rather old."

"I go back farther than you," said the second. "My name is Adam Low."

The third said nothing, but pulled his card from his pocket, on which his companions read the words, "Mr. B. Ginning."—Answers.

Photographer (to young lady)—There is no need of telling you to look pleasant, miss. Such a face cannot be otherwise than pleasant.

Young lady (graciously)—I will take 2 dozen, sir, instead of one dozen.—Ohio State Journal.

RECREATION still has the magnetic power of drawing from our pockets the almighty dollar.

F. W. Mallett, Port Hope, Ont.

You are not up to date unless you have seen the

Ejector and Non-
Ejector
Single or Double
Trigger

IMPROVED LEFEVER

Our catalogue describes our
New Medium-Price Hammerless



LEFEVER ARMS CO., Syracuse, N. Y.

This New Trap and Field Gun meets the requirements of sportsmen who desire a first-class and reliable gun but are not prepared to buy our higher grades.

Remember Last Year's Record at the **GRAND AMERICAN HANDICAP**

Dupont Smokeless Won

....MORE MONEY....

Than All The Other Powders Put Together

Also, the WINNER of the CUP, FOUR of the SIX STRAIGHTS, the Majority of the 23's and 24's SHOT

DUPONT SMOKELESS

E. I. DUPONT DE NEMOURS & CO.

Send for Circular

WILMINGTON, DEL.



PETERS
PERFECT
PROJECTILES
PLEASE
ARTICULAR
PEOPLE,
PRODUCING
PROFITABLE
HUNTING.



No black powder behind a bullet! On account of its wonderful action in Rifles and Pistols, King's Semi-Smokeless has been adopted in all metallic cartridges (excepting smokeless) without advance in price.

THE PETERS CARTRIDGE CO., Cincinnati, O.

Eastern Branch: 80 Chambers Street, New York.
A. L. Peters, Agt., St. Paul, Minn.; Hibbard, Spencer,
Bartlett & Co., Chicago; and best trade everywhere.

Please tell me how to reload .30-30 Winchester cartridges so the bullets will not be loose in the shells.

W. C. Balch, Bronson, Kan.

ANSWER.

See information given in the Ideal Hand-Book relating to the expansion, resizing and crimping of metallic shells, and fit of bullets, pages 11 to 15. Read also about .30 calibers and smokeless powders, on pages 31 to 37. Illustrations of various .30 caliber bullets and description of the same will be found on page 83. A copy of the Ideal Hand-Book may be had on application to the Ideal Mfg. Co., New Haven, Conn.

In reply to J. D. N.'s questions in January RECREATION would say: It is not worth while to exchange a .30-30 Winchester for a .303 Savage; though the latter is by far the better arm in every way, unless one intends to use a rifle in a rough country like the Rockies, or on horseback. For those purposes I should not take any hammer gun as a gift. As to revolver to use on a ranch, I should buy a .32 or .38, built to shoot the jacketed bullet, smokeless shell, and with .44 frame, etc. This is now a most popular arm in New Mexico.

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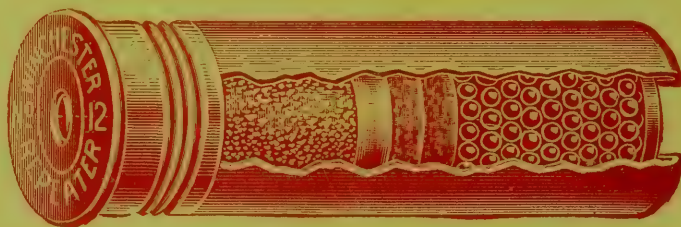
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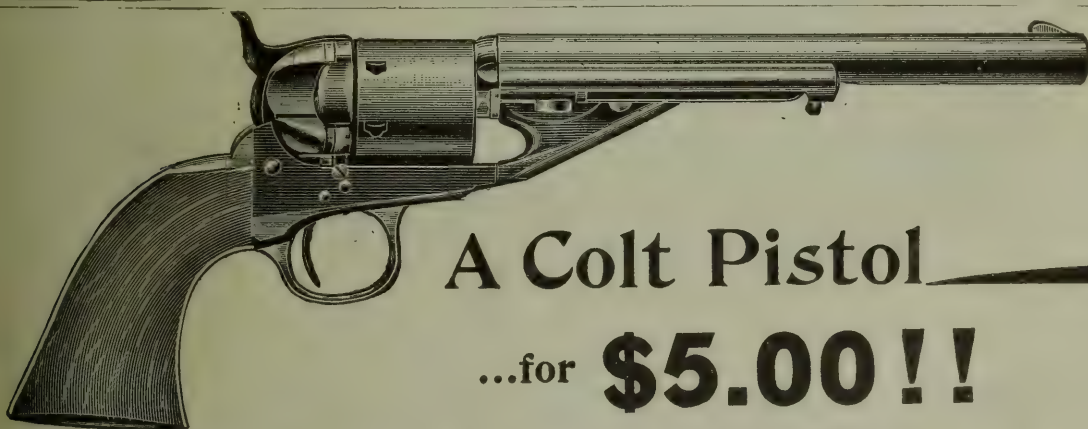
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23 WEST 24TH STREET,
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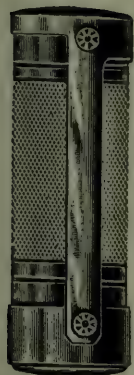
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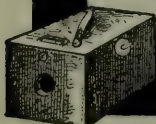


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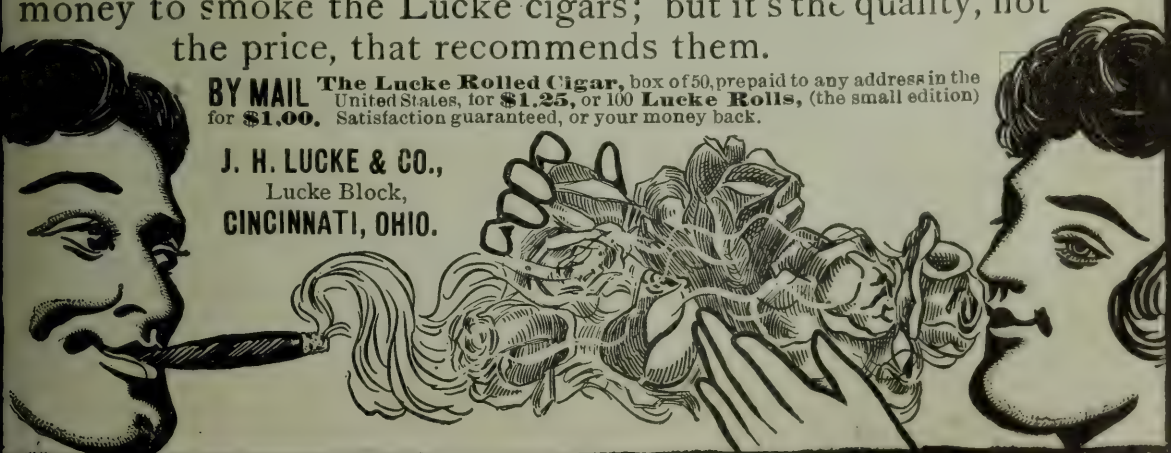
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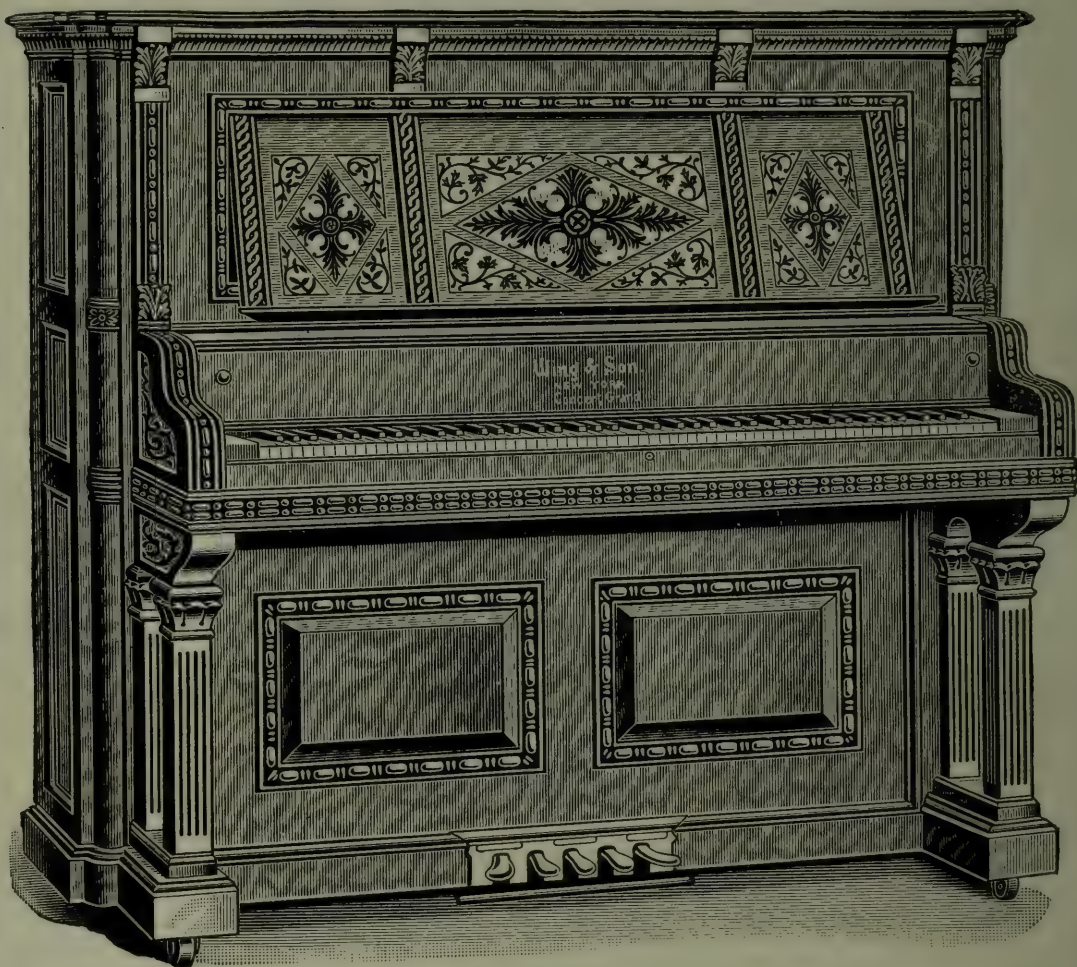
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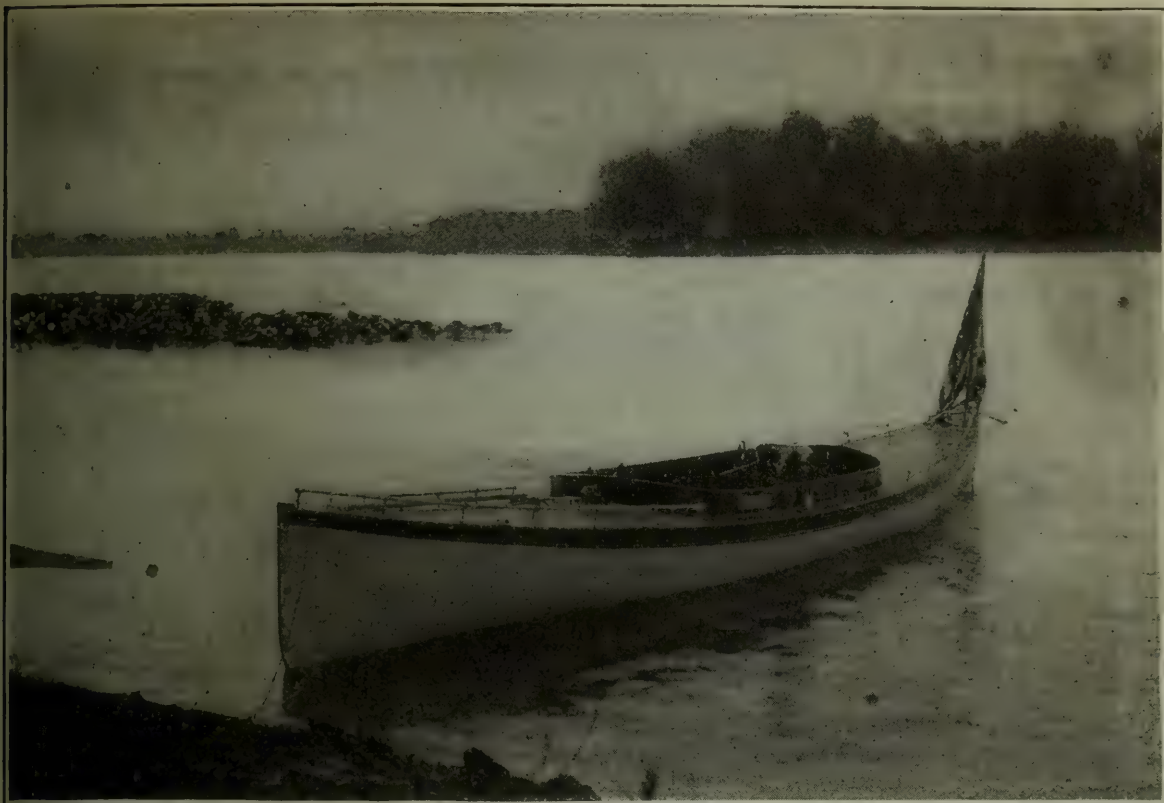


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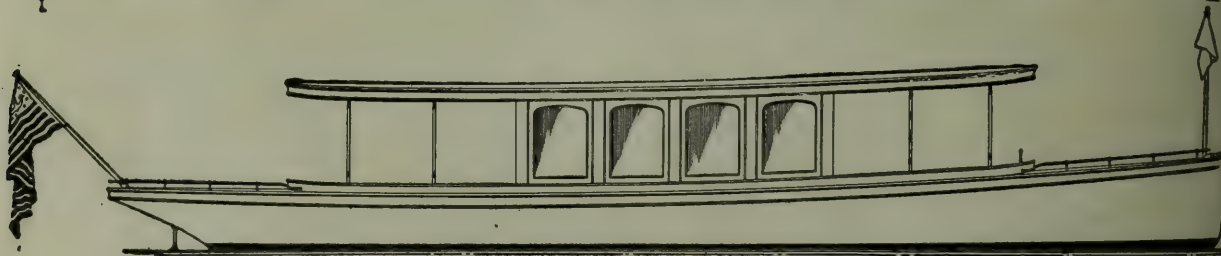
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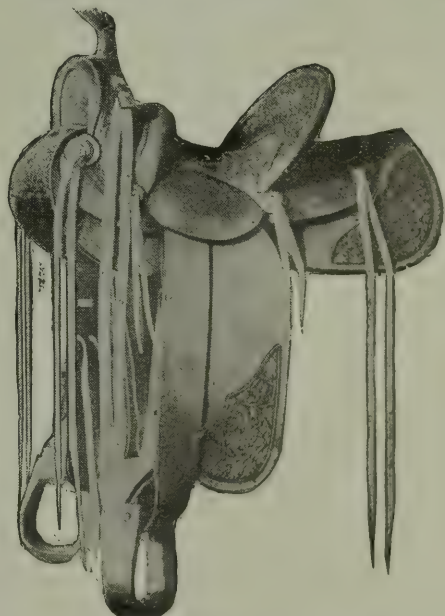
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"I SAW A BIG POLAR BEAR HELPING HIMSELF VIGOROUSLY."

RECREATION

Volume XII.

MAY, 1900.

Number 5.

G. O. SHIELDS (COQUINA), Editor and Manager.

A RACE WITH A POLAR BEAR.

CAPT. S. S. BODFISH.

It was on my 18th consecutive whaling cruise in Bering sea. It was in the winter of '98, and we were frozen in at Cape Bathurst, British America. We had had a successful summer, and the ship was well loaded with whalebone. There was little in the way of amusement, or even diversion, for me or my men; and the long Arctic winter was dreary and monotonous in the extreme.

We had not had a mail for 6 months, and knew nothing of what was going on in the great outside world. We had some books and old magazines on board, but had read and reread them all. We had no theatres, no political meetings, no camp fire clubs, no prize fights, no wide open tenderloin to amuse us.

True, we occasionally got up a game of penny ante; but even if we won the other fellows' money, there was no way to spend it. So the only real dissipation open to us was to sit around in the cabin, smoke plug tobacco and plan what we should do when we got back to Frisco, 8 months hence.

There were no animals about us, except seals, walruses and polar bears, and the 2 former were so familiar to us that we took little notice of them.

Some of your readers, if they could have been with us, would have had great sport shooting these animals. I do not say hunting, for there was little hunting about it. The seals and

walruses lay everywhere on the ice, about the air holes, and all we had to do was to sneak up and slip a bullet into one as he lay asleep.

Yet we killed but few of them; just enough to supply our dogs with meat and the ship with oil for fuel and lights.

At rare intervals a trading party of Indians came to us, but they had little to sell, and consequently, little means with which to buy; so our traffic with them was exceedingly small. Occasionally, 2 or 3 of my hunters would make a trip inland, for caribou or musk oxen, and they usually returned empty handed. Both species of game are reasonably plentiful on the Arctic coast, to the East and West of the McKenzie, but the country is so vast in extent it is only by making long, tedious and persistent hunting trips that men can find the bands of game animals which inhabit that desolate region.

A man who hunts game to sell has no enthusiasm in his work. With him it is the same as quarrying stone or digging potatoes. The idea of sport does not enter his head once a week. And so it is that a whaling crew, even when frozen in for 8 long months, does little hunting or shooting, even though game may be abundant all about them.

I did bring out, on one trip, 74 musk ox skins, but most of them were bought from the Eskimos. I have



“THERE WERE BUT 3 DOGS IN THE WHOLE
PACK THAT WANTED BEAR.”

picked up a few musk ox skins on nearly every trip I have made to the Arctic region. I usually get also a few caribou skins or heads, and a few polar bear skins.

For the use of the hunting and trading parties we kept on board a large number of dogs. The only means of transportation in that country is by dog teams, and a good dog is worth as much there as a good horse is in Montana.

We had about 60 dogs with us in this winter of '98, and it was no small undertaking to feed them. We had secured several carcasses of walrus, and had cached them on the ice, or stored them in the hold of the ship. I had a lot of this meat in a hogshead, on shore, about 200 yards from the ship, arranged in such a way that the dogs could work on it without wasting it.

I say “work on it” advisedly, for of course the meat was frozen as hard as the ice about us, and so the dogs were not likely to get away more of it than they needed.

These Eskimo dogs are great hustlers. They will come as near living on wind as any animal I ever saw; yet when they get a chance to fill up on meat it takes a lot of it to fill their long-felt want.

Their steady diet, when traveling across country, is frozen fish. Your New York bench show pointers or setters would starve to death on this, yet an Arctic dog will, after a hard day's work, gnaw away on a frozen white fish until far into the night. Then he will dig a hole in the snow, curl up in it and sleep as soundly as your dude pointer will on the Persian rug at the foot of your bed.

One morning my Indian boy, Neponack, came running up the plank and shouting at the top of his voice that there was a bear near the ship.

I am not much of a hunter, but I object to being run over by game; so I always keep a rifle and a belt of

cartridges within reach. When my young savage sounded the alarm I grabbed my Winchester and cartridge belt and started to look for the game.

As I drew near the meat cache I saw a big polar bear, with his head down in the barrel, helping himself vigorously. The whole pack of 60 dogs were leaping, barking and howling about him. The bear paid no attention to them, and they all seemed afraid to take hold of him. I walked up to within 100 yards and took a shot at old *Ursus arcticus*. When the ball hit him he leaped into the air, and as he came down on the ice the entire pack of dogs lit into him. For a minute or 2 there was the liveliest fight I ever saw. The bear let out in all directions with his great paws, and at every blow some poor dog was sent shrieking and spinning across the ice. As soon as the bear had thinned out the pack sufficiently to escape, he struck out across the ice floe, for a bit of open water half a mile away.

At that stage of the game there were but 3 dogs in the whole pack that wanted bear. The others had had more than they cared for. Those 3 dogs followed the bear, and for a few hundred yards there was as pretty a race as was ever run on any track. There was simply a streak of creamy white followed by a streak of black.

I started in pursuit, but did not dare fire for fear of killing a dog. The bear was handicapped by the wound I had given him, and after running a few hundred yards the dogs caught him. Then there was another scrap of about 10 seconds, and the race was reversed. That time the dogs were coming toward the ship as if they had been shot out of a gun, and the bear was after them. This was my inning. I waited until the bear came within 50 yards of me, when I put another bullet into him that broke him down; but he soon got up again and started for another piece of open water in

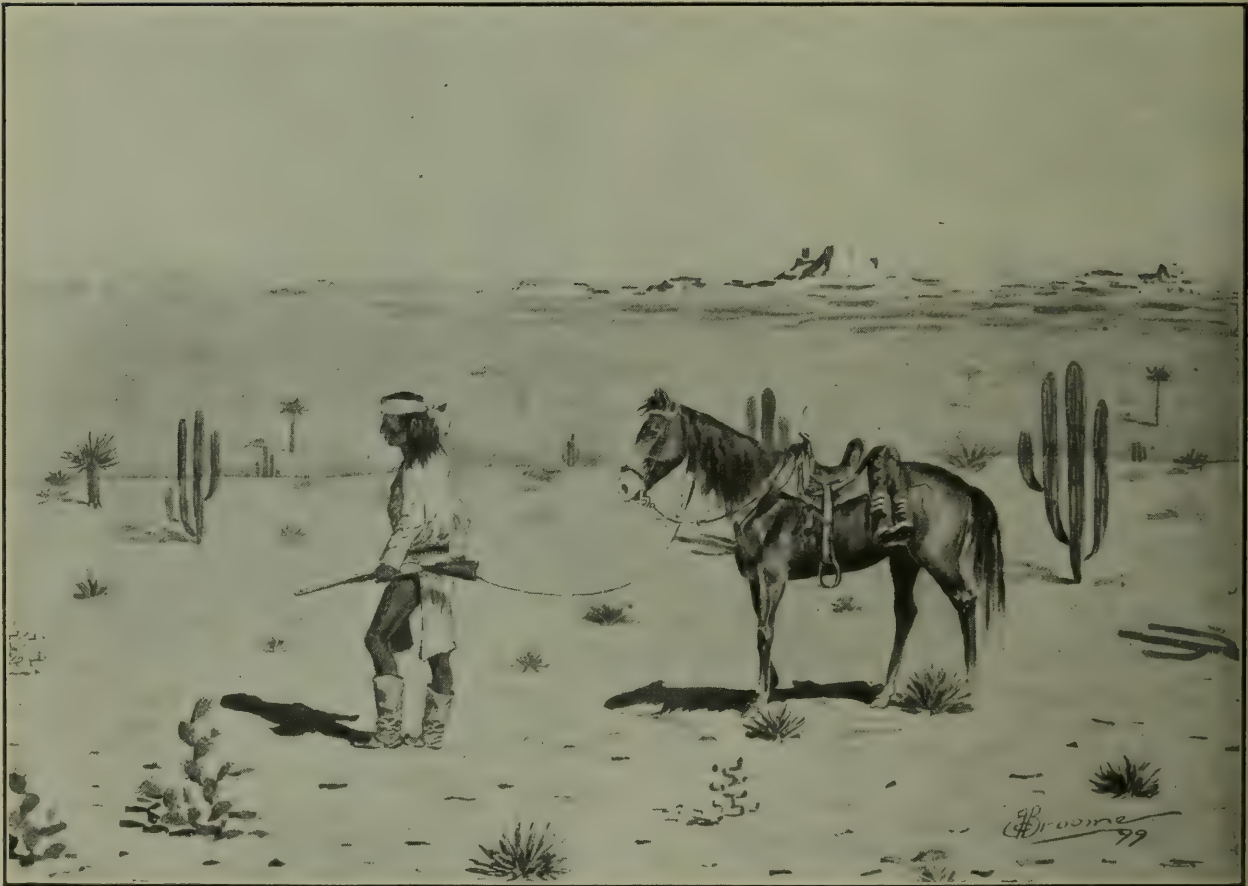


"THEN THE RACE WAS REVERSED."

another direction. He came within an ace of reaching this, but another bullet stopped him near the edge of the ice floe.

By this time the whole crew of the ship and a dozen Eskimos, who were camping on shore near us, had come out to see the fun. We put a line around the bear's neck and dragged

him on board, where we skinned him. When the fight was going on, I would have sworn the bear would weigh a ton, but when we got him on deck he seemed to have grown much smaller. Still, he was a good sized animal, and his skin, which is now made into a rug, is a most beautiful and interesting trophy.



AN APACHE HUNTER.

Unto a little nigger

A-swimming in the Nile,
Appeared quite unexpectedly

A hungry crocodile,
Who, with that fierce politeness

That makes the warm blood freeze,
Remarked "I'll take a little dark meat,
Without dressing, if you please."

—Exchange.

Tailor—Have you seen Skipper lately?

Friend—Oh, yes. I see him 'most every day. Why?

Tailor—The scoundrel! It's nearly a year ago since he came in here and ordered 2 suits of clothes at so much per suit.

Friend—I see! And it's been a matter of pursuit on your part ever since.—*Richmond Dispatch.*

FISHING FOR GRAYLING IN THE AU SABLE.

G. A. WARBURTON.

The Au Sable river in Michigan flows into Lake Huron after a run of more than 100 miles through a wild country. It is interesting to the angler because it is one of the few streams in the United States that contains the grayling, common enough, to be sure, in brooks of Tennyson's land,

"With here and there a lusty trout,
And here and there a grayling."

The method of fishing in the Au Sable is unique. The angler takes his seat in a flat bottomed boat with his guide behind him, to steer and steady the little craft as it glides down stream. The paddle is seldom used, except in the long stretches of dead water, a steel pointed pole being the most serviceable in the swift and shallow river. With this the boat is both checked and steered. My trips for grayling have been taken about the middle of June from a town named after the fish, located about 200 miles North of Detroit, where guides, supplies and tents have been secured. The upper waters on the Au Sable are well stocked with brook trout, and the rarer fish have been driven to the deeper parts lower down. A war of extermination is going on, in fact. The trout is too lusty for the more gentle grayling, and his voracity is playing havoc with the original denizen of the stream. Besides the common brook trout, the rainbow trout has been introduced, so that the life of the grayling in the Au Sable is a constant struggle, with the odds sadly against him.

Boarding the boat we have floated slowly down with the current, taking such fish as were foolish enough to bite, and coming at evening to where the tents had been pitched, on a high bluff from which a fine sweep of the river refreshed the eye. The distance by land is about 25 miles, but by the stream 40. The sandy bottom, clean and white, makes good feeding ground for the grayling, and when a fish is hooked he is sure to be of good size and in excellent condition. There are few *fontinalis* here, the rainbow and the grayling holding undisputed possession. I yield to no one in my admiration of the trout:—

"That gleam of silver, flecked with red;"

but the grayling fills my idea of beauty even better. I have called him the Adonis of fishes. Slender, graceful, with dark back, bright silvery sides and white belly, his great dorsal fin rises above him like the sail of some little ship, and, over all, is that peculiar iridescence, so fleeting and so beautiful. His rarity adds a charm also,

and the probability of his speedy extinction gives an air of pathos to his very being. He does not grow fat and ugly, keeping always below the 3-pound limit. The largest I have taken have not exceeded 2



A SAMPLE CATCH.

pounds in weight, but in them all the lines of beauty that belonged to the smaller fish had been kept. The grayling has a tender mouth, and is not easy to land in a swift current. He rises to the fly with grace and with more deliberation than his spotted rival, though his strike is fierce and his fighting qualities not to be despised. He lies on the bottom, and is not a surface feeder like the trout. His favorite places in the streams are those that lie open to the sun, where sandy or smooth, gravelly beds make the sight of

his prey easy. He seldom or never hides under or behind a rock, depending on his speed to make up for his lack of craftiness. His habitat is in the Au Sable and the Manistee and their tributaries. Like the Indians, he is disappearing before a stronger race. He will soon be only a memory. But I shall always think of him as the perfection of game fishes and look

back on him, leaping in the waters of the clear Au Sable, with delight.

O gentle grayling, unto thee
I turn with grateful memory;
Thy beauty and thy grace I praise,
And mourn the limit of thy days.
Yet, in that land where streams are bright,
It may be, I shall catch a sight
Of thy swift shadow in the air,
And find a grayling leaping there.

HUNTING BEAR WITH A .22

ARTHUR C. WHEELER, M.D.

While on a pleasure trip to Northern Minnesota in the fall of '97, I went out riding with a party of ladies and gentlemen from Stephen to have a picnic and to see some beaver dams, about 16 miles East of there. I took my .22 calibre repeater along.



AMATEUR PHOTO BY DR. A. C. WHEELER.
THE TWINS.

We had traveled about 10 miles and were passing through some small timber when we espied 4 black bears crossing a branch road not over 50 yards away. I soon had my gun out of its case and the magazine full of .22 long rifle cartridges. Then I started in where the bear had disappeared. The brush was extremely thick and the grass so tall it made an excellent hiding place for them. I hunted for them half an hour and had nearly given up when I came on them in a slough, only 40 yards away. I saw one of the old bears first. She stood nearly broadside, her head turned and watching me as a cat would a mouse. I raised my gun slowly, took good aim for her heart and pulled. She went down the instant the ball struck her, and I thought I

had her, but in a moment she swung her head to her side and began biting at the wound. I fired again for her heart. When the second ball struck her she jumped up and began to shamle away. I fired 2 more shots before she reached the brush, but 20 or 30 feet away. She ran 75 or 100 feet I thought, then stopped. Just then one of the cubs made his appearance. I fired and he fell, but immediately got up and ran back into a clump of willows. The other cub then started out, when I fired and sent him back. When firing at the cubs I heard the brush smashing as if an elephant were going through, and thought I caught a glimpse of another old bear (probably the male) running off, but did not fire. On going up to the willows I fired 2 shots into them, driving out a cub, which I shot at and broke his back. He began to squeal when I ran up close and shot him in the base of the head. This stopped his music. At that juncture the lever of my gun clogged so I couldn't load. I knew the squealing of the cubs was likely to bring the old bears down on me, so beat a hasty retreat for 50 yards or so, where I met one of my friends coming in to join me. I took my gun apart but was unable to find the trouble. I reloaded and went back, but could not find the old bears. The wounded cub climbed a tree when I gave him a finishing shot.

We hunted for the wounded old bear but could get no trace of her. Next day we came back with some dogs, but could not get them to follow the trail as they had not been trained for that kind of work, so we finally had to give her up.

Funniman—Have you heard the story about the 2 holes in the ground?

Gullem—I suppose I'm to say "No!" then you reply, "Too deep?"

Funniman—That's not it at all.

Gullem—No? Then I haven't heard it.

Funniman—Well, well. — Philadelphia Press.

A CANOE TRIP TO OKEECHOBEE.

C. O. MOSELEY.

The 20th of March, 1898, found my friend E. and me, with our guns and camping outfit loaded in 2 home-made cypress canoes, leaving Ft. Myers, Florida, for a trip up the Caloosahatchee river to the Okeechobee lake region. We had little tents, extending the length of our boats, which could be easily put up or taken down, and we also had mosquito bars. I advise anyone who travels in that region to provide himself with a bar if he has to sell his hat and shoes to get it. There is little to see along the river until Ft. Denaud is reached. From there beautiful hummocks line both sides of the river all the way to Ft. Thompson, the last settlement up the river. E. and I thought we were embarking on a pleasure trip, but if ever 2 mortals worked as hard as we did under the impression that it was fun I wish they would send their address. I want to compare notes with them. It was all right at first, paddling up the mysterious river, where the Indians used to drift in their dugouts, but we had something to contend with that never troubled the Seminoles. The Okeechobee Drainage Company several years ago cut a canal, draining the big lakes into the Caloosahatchee, and the result is a current against which paddling is about as much of a pastime as splitting rails. However, we got along very well until we reached Thompson. At night we would tie up and cook supper in the good old 3-legged bake oven, the best thing to cook in ever invented. Sometimes we had a mess of fish to fry; sometimes we landed in time to stroll among the beautiful live oaks and cabbage palms, which form most of the hummocks along the river, and kill a mess of squirrels before dark.

We were several days paddling up the river to Ft. Thompson, and every mile the current became swifter. From below Ft. Denaud to Ft. Thompson the banks are high and beautiful, but just above the latter place the river, previously only 40 or 50 feet wide, merges into Lake Flirt, a curious combination of shallow ponds, sawgrass and bogs, cut up by little channels, and full of catfish, bass and perch. This lake has no banks, apparently, but gets shallow so gradually it is hard to tell where the shore begins. It was then very low, and there was a flat meadow $\frac{1}{2}$ mile wide, stretching from the water to the timber and covered with blanket grass. On this meadow large numbers of sandhill cranes were feeding and marching about, splitting the air with their cries.

From Thompson to Lake Flirt the river runs like a freshet, between rocky banks, and there I enjoyed a laugh at E.'s expense. The current ran so swiftly paddling was an impossibility, so we had to pole. That was something E. had never tried, although he was a good hand with a paddle. Instead of shooting ahead as it should, the stern of his canoe would shove around broadside, when the current would catch it, and around it would go. E. said something about damming the river, but I couldn't catch all he said. However, after straining every nerve for half an hour trying to get around a bend, he finally got the hang of it. I thought he talked unnecessarily loud, though, while he was learning.

The people at Ft. Thompson build their houses 3 or 4 feet above the ground, as the river has a queer habit of flooding the surrounding country when it takes a notion. Everybody who is not in the cattle business hunts alligators for a living, and they have the reptiles cleaned out so thoroughly we seldom saw one. We made Lake Flirt a little before sundown and struck camp. I killed a sandhill with my .38 Winchester and fried him for supper. I wish I could add that we ate him, but he refused to be chewed. We sadly threw him away, nursed our aching jaws, and wished we had been younger.

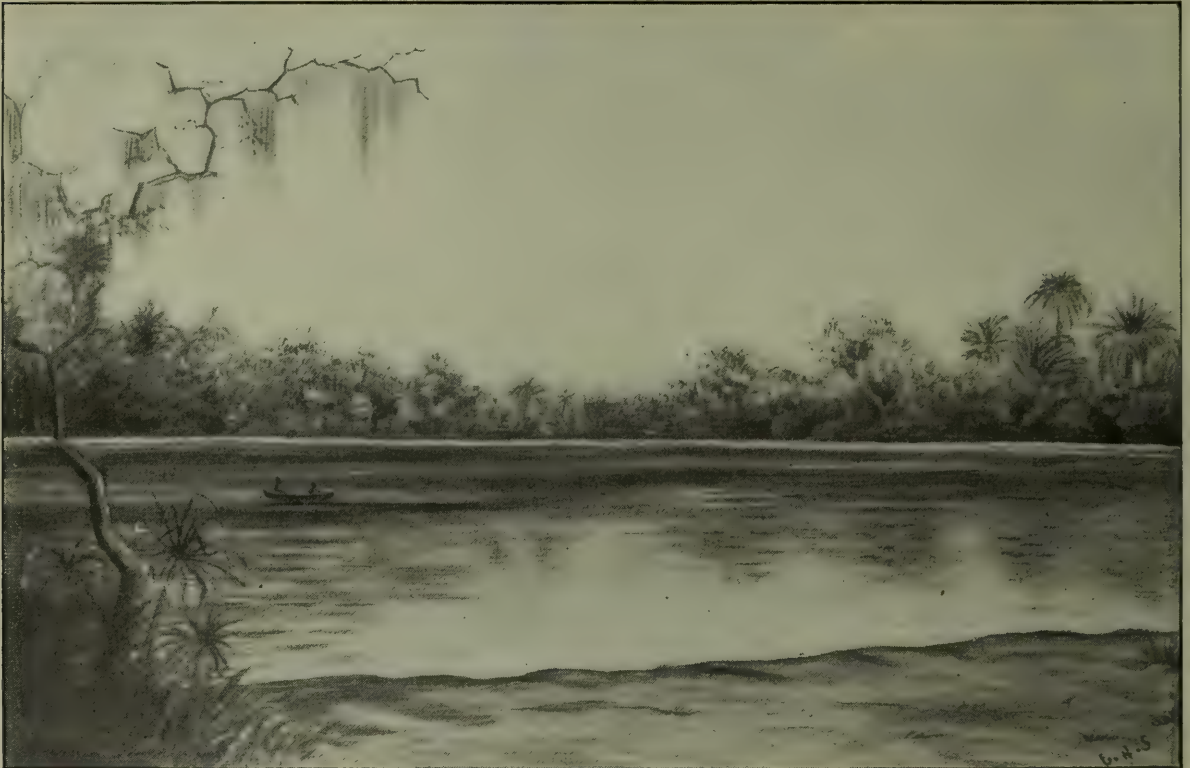
Thousands of coots make their home in Lake Flirt; also a good many teal and wood ducks. From that lake to Okeechobee the river runs mostly through the canals cut by the Drainage Company, and is the best place I know for black bass, or trout, as we call them. The water is very swift and the fish are good. I had a cheap rod and a cheaper reel, but I had more fun than many a man gets with a costly outfit. We could stand on the bank and see the bass in swarms and watch them strike the spoon. There were many very large ones, but they were slower to strike. The majority would weigh 2 to 8 pounds each. On the bottom was a constant stream of catfish, from 3 feet in length down. The worst trouble was in stopping when we had as many as we could use, but we did, for yours truly is an enthusiastic reader of RECREATION. "'Nuff sed."

There is a strange kind of long legged bird, about half the size of a sandhill crane, and looking like a small edition of one, that inhabits the sawgrass along the canal. They make the most dismal, cackling sort of cry that "was ever heard from throat of bird." Every little while one

of these queer creatures would rise and go flapping aimlessly off over the marsh, uttering its sorry cry, but do what we would, we never could get one. They were always out of range before we saw them. They seemed to deride us as they flapped and cackled their way along. The alligator hunters call them limpkins.

After 2 days' paddling and poling we floated into Lake Hickpoochee, a great shallow pond 5 or 6 miles long and half as broad, with no banks and only one good camping spot near it. That consists of a narrow bank of sand covered with low bushes. Back of it is the sea of sawgrass,

snakes in that marsh I ever saw, but we wore canvas leggins and didn't pay much attention to them. It took 4 teal or 3 mallards to make us a square meal. We would get back to camp in time to clean them before dark, and then lie around the fire while they cooked. Oh, those little fat teal! It makes my mouth water now to think of them. We put them in the pot and stewed them tender; then laid them on their backs in the bake oven, with a slice of bacon on each breast, and baked them brown. From the broth left in the pot we made gravy that would make a man "hit his daddy." Ducks, gravy, hot



UP THE MYSTERIOUS RIVER.

which surrounds these lakes in every direction for miles and miles. Several canals, now almost obliterated, mark the vain attempt of the Drainage Company to reclaim this vast morass. Occasionally one finds the rusty skeletons of what were once powerful dredges.

We spent a week at that place. Back in the sawgrass were some open sloughs, where we killed all the ducks and snipe we could use. I also secured 3 beautiful skins of the roseate spoonbill, or, as we call them, pink curlew. Our principal meal in camp was always supper, so in the afternoon we would go out in the marsh and kill our ducks for the evening feast. The birds were feeding at that time of day, so one would take a stand behind a bunch of sawgrass and the other would wade around and drive them over him. There were the most moccasin

biscuit and sweet potatoes were our bill of fare every night. I'm ashamed of it, but that week we lived to eat, and every day we let out a hole in our belts.

The beautiful, unfortunate plume birds are gone. We saw 8 specimens of the snowy heron on our trip, and of white egrets not one. We have a law for their protection which is never enforced. George Hendry, who runs a trading store on the Upper Caloosahatchee, told me about 3,000 plumes were collected in the big cypress country last season, principally by Indians. There are many otters in the sawgrass, but, happily for them, it is almost impossible to get at them.

From our camp on Hickpoochee, we pulled out one day for Okeechobee, separated from it only by a few miles of custard-apple swamp and sawgrass. We entered the 3-mile canal, and it took us 4

hours to pole up it. At last, just before sunset, we emerged into the great, mysterious Okeechobee, the dismal lake of swamps and mosquitoes. As far as we could see the coast was a line of low bushes and an occasional stunted cypress, with a fringe of tall grass growing out into the lake. Night was at hand, and we hustled for a place to camp. The most promising looking place was a cypress with some bushes around it, but when we got there we found no shore; nothing but a wretched swamp, 2 feet deep in water. We pushed on to other places, but still the same villainous, bushy swamp, with nothing behind it but miles of sawgrass. It was getting dark, the lake was getting rough, and there was no ground to camp on. We had to force the boats as far into the grass and bushes as we could and camp in a foot of water. Cook we must, so we cut a few armfuls of reeds and brush, piled them up on the water and started a fire. There was no chance to cook anything but dog-chokers and bacon, and we came near not getting those, for as night settled down mosquitoes, in numbers few would believe without seeing, assailed us, and it was with difficulty we finished our meal. The noise of the insects was like that of swarming bees. It was not a humming—it was a terrifying roar. I had heard tales of mosquitoes in the 10,000 islands darkening the air, and now I believe them all. We bolted our supper and flew to putting up the boat tents and hanging the bars; but so thick were the insects we could not entirely keep them out, and it was after one o'clock when we got to sleep.

Early the next morning we continued South, and after some 15 miles sighted a small bay formed by a point of low timber and bushes running out in the lake. As we drew nearer we saw a white speck inside the point, which proved to be a tent fly, occupied by 3 'gator hunters. They told us that was Sand Point, the only spot of dry ground for many miles up or down the lake. We were much surprised at the absence of bird life on the lake. There was nothing but a few coots and an occasional fish hawk. We were wind bound at that place 5 days and learned much about the lake from one of the hunters who had lived years in the everglade country. They were going to Pelican lake, South of Okeechobee. They told me, as did another party I met, that millions of curlew and ibis had rookeries there.

We spent most of our time under our bars, but sometimes during the day we climbed the highest cypress we could find and escaped the insects for a time. From that height we could see miles in every direction, and there is no more God-forsaken place in the United States than

Okeechobee. On the East and North, the limitless lake; away to the West, over 20 miles of sawgrass. There a faint blue line marked the great, unbroken woods, stretching away to the everglades and the



OLD EVERGLADES.

Gulf. To the South the sawgrass reaches 60 miles. Off in that distant timber were deer, turkeys in plenty, bears, panthers, cats and Florida wolves, but we could as easily have reached them in the moon.

The hunters took advantage of their enforced stay at the point to load shells for their hunt. Old Everglades had an old .45-60 Winchester and I watched him run bullets and load. It would have made Mr. Barlow and all the other members of the Ideal Manufacturing Company shudder to see him. He had an old piece of tin for a ladle, bent so it would hold a little lead. That he would hold in the fire till the lead melted, and then pour it into a cold, rusty mould. The result was bullets that looked as if they had smallpox, and no 2 were alike. However, I suppose they answered for killing alligators, which are usually shot at short range.

When the wind and waves finally calmed down we were quite ready to return. As E. said, Okeechobee was our fighting word. The farther we got from the lake the fewer insects there were. In fact, they troubled us little elsewhere, but I believe one night spent on Okeechobee, in the spring or summer, without protection, would kill the toughest man in the world.

Our voyage down the river was so swift and easy it repaid us for our hard work in getting up.



"SURE THE LORD MADE THIS SPOT."

UNDER THE OLD BEECH TREES.

MONCURE BURKE.

Under the old beech trees,
Fanned by the sleepy breeze,
Doin' ez I durn please,
 Whilin' time away;
Close to the spring-fed pool,
Shady an' deep an' cool,
Watchin' the little fish fool
 All the livelong day.

Lyin' thar, easywise,
Old hat over my eyes,
Keepin' off bugs an' flies,
 'Joyin' ca'm repose;
Hole in the old crown, too,
Peepin' out in the blue—
Way up—almost clean through!
 Glimpsin' things—who knows?

Slavin' yonder in town
System got all run down,
Couldn't do nothin' but frown—
 Life warn't fit to keep;
Came to the woods an' streams,
Now, an' begosh, it seems
Can't help smilin' dreams,
Wakin' or asleep!

Sure the Lord made this spot
Jes' for the weary lot!
An' jes' as like as not
 He ain't fur away;
So by the dear ol' trees,
Fanned by the sleepy breeze,
Take I my fill of ease,
 Dreamin' smiles all day!

PUSHING A MUSKALONGE.

E. E. HICKOK.

Leaving Chicago at bedtime after a hot August day, the morning found us spinning Northward over the Wisconsin Valley Division of the C. M. & St. P. R. R. There were 2 of us in the party. All summer we had been looking forward to this trip, and from time to time had visited tackle stores until our outfits were more than complete. Little flies and big spoons, from No. 6 up to No. 12; sinkers, bobs, landing nets and gaffs; little guns and big guns; we had them all.

Charlie had been up that way before and had persuaded me to come from the Southland for this vacation with him.

Before noon we reached the lake region, the road winding about between beautiful sheets of water, some a few acres in extent, others several miles across, with all sizes between the 2. Charlie says nearly all the lakes have fish, but some more than others, and that one lake may be noted for bass, another for jack salmon, another for muskalonge, while some have all kinds.

The stations along the line are nearly all summer resorts, but there are so many lakes there is plenty of room. There is no danger of the lakes ever being fished out or of the region becoming so civilized as to spoil the game. The State has passed stringent laws looking to the preservation of the purity of the waters, making it a misdemeanor, punishable by fine, for anyone to throw any refuse, even a dead fish, into any of the lakes. The lands are practically unsettled, so the game is not driven away; while the second growth timber furnishes abundant protection, and with proper enforcement of the game laws, Northern Wisconsin will always remain a hunter's and angler's paradise.

Charlie had selected Plum lake for our destination, which is easy of access, yet in a manner out of the world. He says this lake has deeper water than any of the others in that section, and that more and larger muskalonge are caught in it, while in close proximity are numbers of other lakes famous for the several varieties of fish. For instance, it is $\frac{1}{4}$ of a mile to Star lake, $\frac{1}{2}$ a mile to Razor Back, a mile to Bass lake, with Lost lake, Found lake, St. Germain, big and little, all in walking distance. There are good accommodations, too, and good boats, all at fair prices.

A substantial dinner and the usual smoke from the little old black pipe (cigars and white shirts are put away) makes us in

even better humor with the world, if such could be, and we feel glad we're alive and glad we're here.

To describe our stay, the numbers of fish we caught; to tell of Charlie's big fish that got away; his rod that dropped overboard in 15 feet of water 100 yards from shore and how we fished for it, off and on, the better part of 3 days before we dragged it from the deep with the 8-inch ringed perch still holding to the hook; of the rock bass which might be caught by the wagon load if one wanted them; in fact, we did fish an hour for them, just for curiosity, returning them carefully to the water as soon as caught, and by actual count had 115, only quitting because we were tired of pulling them up; of fishing in Razor Back outlet for trout, in St. Germain for wall-eyed pike, in Lost lake for the small mouth black bass; of the visits to a nearby summer lumber camp and dinner with the men by courtesy of the owner; the story of the capture of the mysterious and hitherto unknown terror of the Northern woods, the "Hodag"; all these would make too long a story.

The most exciting and interesting of our experiences was toward the last of our stay. The morning was bright, with just enough breeze coming up the 3-mile stretch from the West to make a ripple on the water and cool enough so that we buttoned our coats. I pulled down the North bank, Charlie holding the line, as we were trolling for muskalonge. We had out about 100 feet of line, with a No. 12 spoon, which is about 4 inches long, and no rod. Usually we kept 2 lines out, with a 6-foot rod, one on each side of the boat. We reached the mouth of Razor Back without a strike, and then Charlie took the oars while I held the line. Down at that end of the lake, $\frac{1}{4}$ of a mile out from shore, there is a shallow place, 50 feet wide by 500 feet long. On that bar the water is some 15 or 20 feet deep, and on both sides it shelves off into water 70 to 100 feet in depth. When I took the line I put out one of the rods with a No. 8 spoon, and soon got a pickerel of about 6 pounds, a good enough fish, but "only a pickerel."

On our third trip over the bar I had a strike on the hand line which I at first thought was a log, so solid was it; but in an instant I knew by that peculiar electric sensation that it was a fish and a good one. At the first tightening of the line Charlie pulled off into deep water, and took in the

rod line so the fish and I had a clear field. I took in line whenever I could, but it was $\frac{1}{2}$ an hour, at least, before I had tired the fish enough to get him near the boat. The usual way of landing a fish of over 6 pounds, when there are 2 in the boat, is to bring it alongside, after tiring it, and then shoot it in the head. We had, therefore, left our gaff hook and landing net at camp. When I thought my game was about played out, I told Charlie to get ready to shoot. He clapped his hand to his hip pocket and exclaimed,

"Great Scott! I left my gun in my room; give me yours."

I had done the same thing, and there we were! We had the fish, but could not get him. "Look out, Charlie," said I, "I am going to pull him over."

"All right," said Charlie, and he leaned over so that the gunwale of the boat almost dipped water. I slid the fish over. Charlie grabbed an oar and began hitting the fish for all he was worth. I followed suit with the steering paddle, but the fish made 3 flops to

our one. We scarcely made an impression, except to make it flop faster, and once or twice it almost flopped out. It occurred to me that if I could make a good endwise jab with my paddle blade I could settle him, so I brought it down, spear fashion, with all the force I could muster. In the excitement I overlooked the fact that I might miss the head of the fish, although it looked nearly a foot wide; also that we were not on land, but were $\frac{1}{4}$ of a mile out from shore, with only a $\frac{1}{4}$ -inch plank between us and the water. In less time than it takes me to tell it, my paddle had gone clear through the bottom of the boat, splintering the plank for a foot or more, and the water was coming in as if through a 4-inch hose. Charlie's first impulse was to get ashore. He seized the oars and pulled his best. In 3 seconds or less the water was 3 inches deep, and Charlie threw his feet on either side of the seat, but kept on pulling. By that time the water was over the seat on which he was sitting. The fish, finding itself once more in its native element, had ceased its



IT STRUCK CHARLIE AMIDSHIPS

flopping, but as the water was now deep enough for it to swim, it made a dash to the front. It struck Charlie amidships and walked nearly up to his collar. The fish fell back, and so did Charlie, his feet in the air, kicking. If I had to be drowned the next minute I should have laughed at the picture he made. There was no time to laugh, however, for, although I had no fear but that we would come out all right, something had to be done. As soon as I had seen the first spout of water I had instinctively begun unlacing my shoes. They were off by the time Charlie fell over, so that when he lifted his head I was overboard, holding to the boat with one hand, and getting off my coat with the other. Charlie rolled out, shoes and all, and we held a council. We were in no danger, as the boat, although only 3 inches above water, would easily support double our weight. Our only concern was how to get out of the scrape.

Charlie wanted the fish, and had a plan to save him. He reached over into the bow of the boat and got his little grip-sack of tackle, from which he took a hook about 3 inches across, made of $\frac{3}{8}$ -inch steel, to which was attached a $\frac{1}{4}$ -inch cotton rope 6 feet long. This hook he had trimmed up to use whenever we wanted to tie up to a tree or log for still fishing. He made the end of the rope fast to the boat and then moved along until he was within reach of the fish, which, having

plenty of water, was resting quietly. Watching his chance, Charlie got his hook under the jaw of the fish and gave a jerk, which set it firmly so we were satisfied it would hold.

The next thing was to get ashore, which we did by getting at one end of the boat and pushing it ahead of us as we swam. Where we landed there had been a camp, and a landing had been brushed out, so we could pull the boat ashore. It was so full of water we could not pull it out, but we pulled it up as far as we could, and let the water run out. Then as it lightened we pulled again, until, finally, the water was all out. Meantime we had got a rock and pounded the head of the fish until he was dead. Pulling the boat entirely on shore, we reversed ends and put it back in the water. Both of us then got in the end away from the break, thus raising the break above water so we could paddle the 3 miles back to camp. By the heat of the sun and exercise of paddling we were pretty well dried out by the time we reached camp.

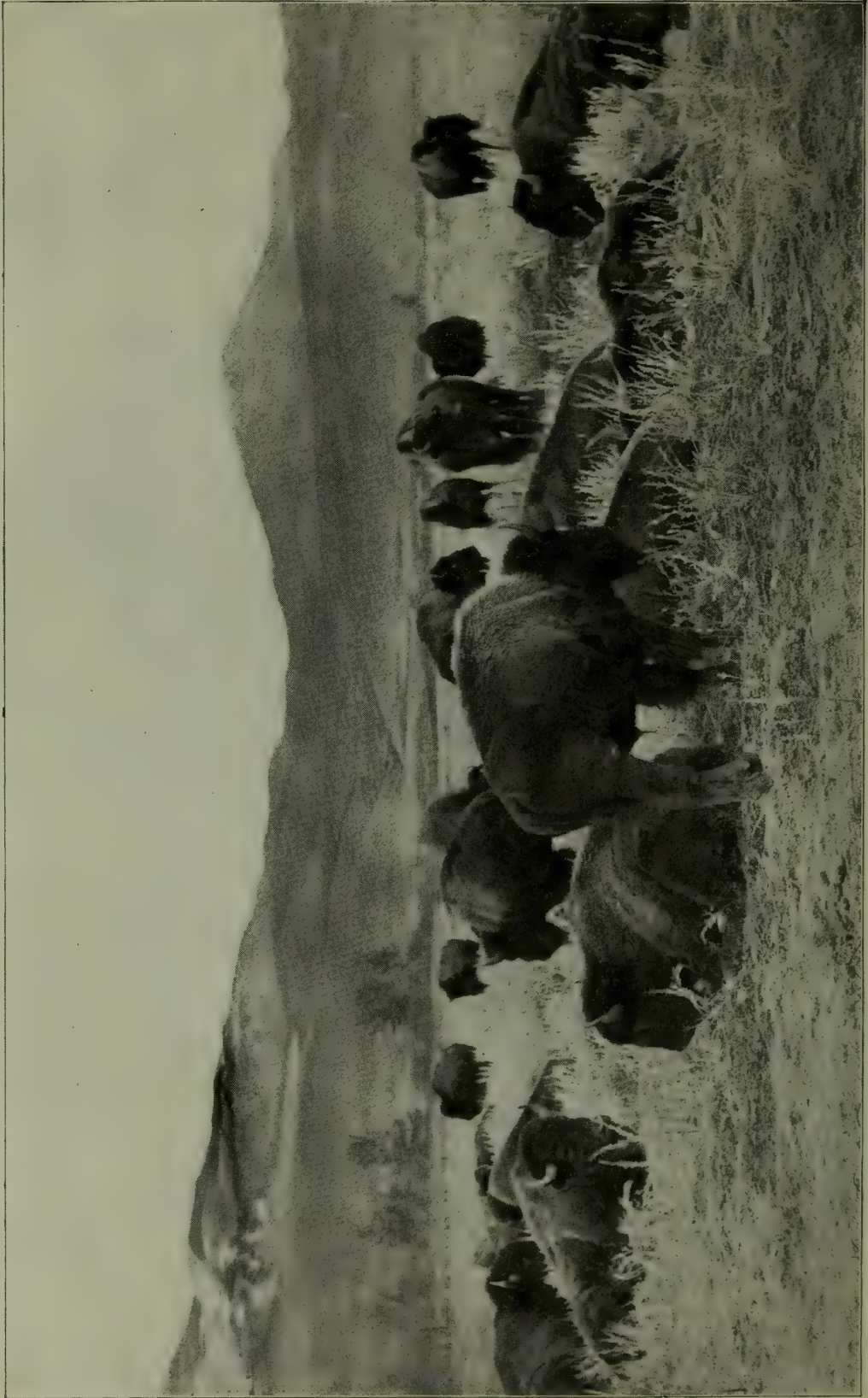
Our catch was a "Musky" 44 inches long. We could not get his exact weight, as the only scales available were 2 of those 24-pound spring balances, and the fish pulled both of them down to the limit. One of them, however, was old, and pulled down 2 pounds before it would weigh anything. The head measured 8 inches across, and now adorns the wall of my den.



LADY AMHERST PHEASANT. *CHRYSOLOPHUS AMHERSTIAE*.
Male. Native of the Mountains of Eastern Thibet and Western and Southern China.



VALLEY PARTRIDGE. *CALLIPEPLA CALIFORNICA VALLICOLA*.



A BUNCH OF THE ALLARD HERD.

THE ALLARD-PABLO BUFFALO HERD.

MORTON J. ELROD.

This is without doubt the largest herd of American bison in the world, and contains about half of the animals now living. The total number of American bison living is placed at about 600. The Allard herd contains about 290.

The herd roams almost at will on the Flathead Indian Reservation in Western Montana, in a section of country bounded on the North by the waters of Flathead lake, on the East by the Mission mountains, on the West by the Pend d' O'Reille river, and South to the Northern Pacific Railroad. This area is some 30 miles by 12, but the herd as a rule is confined to a strip 15 miles by 5, along the Pend d' O'Reille river. A herder takes care of them, being with them almost constantly. They are thus closely watched, have become accustomed to the presence of man, and are seen annually by many people. The herder counts them weekly or oftener, looks after the increase, and keeps note of the place of range of the different portions of the herd. Such attention is necessary from the fact that the buffaloes do not stay together in one band, but scatter in small bands of 5 to 25 or 30.

From their mode of life this herd lives as nearly free from restraint as is possible, and gives a good opportunity for study of this noble beast, now so nearly exterminated. Among the animals are many old bulls, with magnificent heads, horns and shoulders. The story of their combats would no doubt be interesting, and to transport them against their will is a dangerous undertaking. Annually the herd produces many calves, but as to the rate of increase or decrease I am unable at present to say.

Very few people visit the Flathead Reservation without seeing the herd of buffaloes, if time permits. There is always something so wild, interesting and pathetic in such a visit as to firmly rivet it on the memory. The visitor is either mounted on an Indian cayuse or rides in a four-wheeled vehicle of such style and pattern as his purse may command and the region afford. In either case he must be accompanied by an Indian guide who not only knows where the buffaloes roam, but who has sufficient ability to round up enough in one bunch to make the visitor believe the herd is as large as is claimed for it. The dusky lad, with his black eyes, broad sombrero and big spurs, carries in his belt a big six shooter and a quantity of am-

munition, and rides his cayuse with dignity and silence. It is not Indian custom to do much talking. If asked where the animals are to be found he simply points his finger in the direction he hopes to find them. If they are not there he takes another direction, until a small band is located.

The method employed by the Indians in rounding up enough bands to make a good herd for the visitor is interesting, and has its droll and amusing side. When a band of a dozen or so is found the horseman starts them in the direction of some other band, so as to unite the 2. Approaching from the right direction he puts spurs to his horse, comes at them at full speed, yelling at the top of his voice and firing his weapon in the air repeatedly. Such menacing acts apparently strike terror to the hearts of the buffalo, since they fly at full speed, and, of course, continue to do so as long as pursued. Occasionally a cow with a calf resents such aggressive acts and charges her pursuer to protect her young. This act of viciousness on her part has brought the whole herd into disrepute. Visitors are warned that the herd is mean, and that a man is liable to be charged at any time. By this means the different smaller bunches are brought together, until the visitor has seen enough. Frequently as many as 150 to 200 are rounded up. As long as the Indian is near the visitor the latter is safe. The visitor may ride up close to the herd and within a few feet of the old bulls, camera in hand, to take pictures, or he may place his tripod behind the wagon, so as to have protection at the first hostile sign from the enemy. But he may not take camera boldly in hand and walk out to take a picture as he would of a bunch of steers or band of horses. There is apparent sincerity in this idea of danger, though it is reasonable to suppose the nature of the buffalo to-day is much the same as it was years ago. The herd stands quietly enough, the old bulls with shaggy heads making a grand sight. The little calves, the color of Jerseys, are scattered among the herd. They are not unlike cattle in their actions after being rounded up. To take pictures is now easy, if one is not very particular as to the number or the position.*

*In 1883, when this herd numbered only 35 head, I rode round them half a day, and made a number of good photos of them. Charles Allard, who then owned the herd, was with me.—EDITOR.

After the visitor has taken a good look and has expressed his satisfaction the Indian spurs his pony, gives a yell, fires his gun, and the herd is off. If on the following day another visitor wishes to see the herd the same tactics are repeated. It sometimes happens that there are several visitors a week, hence the animals are well run.

What will become of this herd is a problem. They are now jointly owned by Michael Pablo and the heirs of the Allard estate. At Christmas-tide last year several of the fine old bulls were sacrificed for service at the festal board. The flesh was sold in the butcher shops and the heads are mounted to adorn the shops. The price demanded for these animals is so high they are almost out of the market. They cost little to keep, and since they are private property, no one may object to

any disposition that may be made of them.

This herd should be kept and permitted to increase without being depleted. It is large enough to avoid danger of extinction through inbreeding, and is in a region where range is abundant. Government protection is as good as private protection, and the expense for one no greater than for the other. An attempt is being made to make a treaty with these Indians so as to throw open a part of this reservation for settlement. This treaty should, if possible, include the change of ownership of the herd from the Indians to the United States. The country is open, and suitable range could be easily fenced, thus reducing the cost of protection and the liability to injury by poachers. Something should be done to save the herd from being scattered and annihilated.

TO DASH.

BOONE.

Cold is thy bed to-night,
And deep the sleep that binds thee!
So cold, so deep, they still shall be
When light of morning finds thee!

For thou art dead, my dog!
The day has brought us parting;
And at the thought my heart still aches
And bitter tears are starting.

The morning brought to me
Thy gentle, honest greeting;
But when, at evening, I return,
For me no more there's greeting!

Farewell, my noble dog!
My heart is wrung for thee;
Would God I'd to my Master been
As true as thou to me!

My noble dog, farewell!
Thy part, thy lot are done;
That part and lot shall dwell with us
While I behold the sun!

SOME GOOD HEADS.



ELK HEAD.

Measurements—Widest spread, 60½ inches; length of horns, 61 inches; height, 46 inches; around burr, 12 inches; between 1st and 2d tines, 10½ inches.

Length of Tines.

Right Horn.	Left Horn.
1—17 inches	1—16¼ inches
2—18½ inches	2—18¼ inches
3—up 12 inches	3—up 12⅞ inches
3—down 7½ inches	3—down 12 inches
4—23¼ inches	4—23 inches
5—11½ inches	5—14½ inches
6—17 inches	6—17 inches

Between Opposite Tines.

1—8¾ inches	4—54¾ inches
2—25 ¼ "	5—46½ "
3—50 "	6—39 "

Presented to Bohemian Club, San Francisco, June, 1898, by Hon. W. A. Richards.



ELK HEAD.

Owned by Ferdinand Kaegebehn. Mounted by Marion. Spread, 52 inches; beam, 11½ inches. 6 points. Measurements by Aug. Gottschalk.



MULE DEER HEAD.

Owned by N. P. Warren, Salida, Col. Spread, 40 inches.



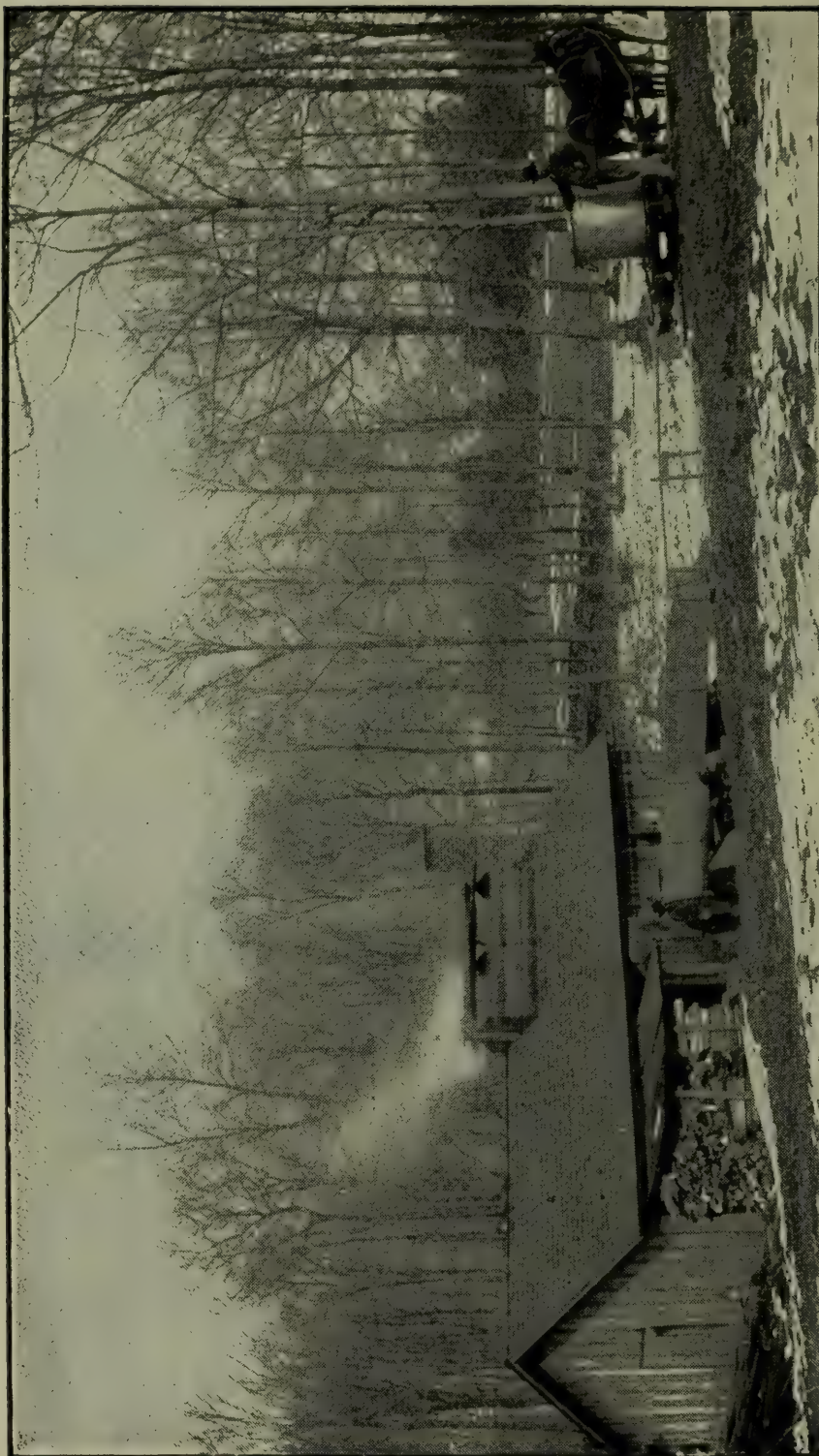
ELK HEAD.

Owned by Ferdinand Kaegebehn. Mounted by Gus. Stainsky. Spread, 67 inches; beam, 108 inches, 22 points.

A hush fell on the court.
"Do you know the prisoner at the bar?" asks the counsel.

"When I've got the price I know everybody at the bar," protested the Colonel, from the witness stand, with dignity.

The Colonel, understand, employs the Kentucky dialect of fiction, which he has learned to speak with considerable fluency.
—Detroit Journal.



BY PERMISSION OF DR. CHAMBERLAIN.

HAULING OUT THE SAP.

THE MAPLE SUGAR AND SYRUP INDUSTRY.

JOHN C. GIFFORD.

The maple sugar and syrup industry is purely American. It is, in fact, the only forest industry which is carefully and scientifically conducted in this country. The best description of the process of manufacture and care of the sugar orchard is by Colonel William Fox in the latest report of the New York State Forest, Fish and Game Commission. In this report Colonel Fox states that 50,000,000 pounds of sugar and 3,000,000 gallons of syrup are manufactured every year in this country. Seventeen per cent. of the granulated sugar output of the United States of America is yielded by the sugar maple tree. The State of Vermont is the leader, having produced last season 14,123,921 pounds of sugar and 993,685 gallons of syrup.

A sweet sap is yielded, more or less, by all the maples, and, I have been told, also to a certain extent by the hickories. The rock or sugar maple (*Acer saccharinum*) is, however, the principal source of the product.

This is truly an American industry, for we are indebted to the Indian for the first knowledge of it. He tapped the tree, collected the sap and boiled it in crude receptacles. We practice to-day practically the same method, although it has been much improved; the product is, of course, cleaner, and the implements better. The old method was to box the tree in a rough manner, inserting a hollow reed or a piece of shingle, down which the sap trickled into a pail on the ground. The repeated wounds of the axe soon ruined the trees. It was discovered also that an auger hole was quite sufficient. At first a hole $1\frac{1}{2}$ inches in diameter was made; now a $\frac{3}{8}$ -inch bit is used. The hole is bored about $1\frac{1}{2}$ inches in depth, slanting slightly upward. A galvanized spout on which the kettle is suspended is inserted. Nails which will rust should never be driven into the tree, or, in fact, into any tree.

The first tapping is usually begun breast high. Then the next a little lower, and so on, but this rule is not always followed. One spout to each tree is sufficient. The tree is usually tapped first on the South side. The largest flow is obtained from the side on which there are the largest roots and branches. Sugar can be manufactured from the sap of young trees, but the yield is less, labor greater, and the young trees are more easily injured. Sapping does not injure the tree to any extent if done with care. There are trees in ex-

istence which have yielded sap for more than a century.

Never tap a tree where the bark is rough or unhealthy. Select a clean, smooth surface, because the slightest amount of decayed wood may discolor the sap and injure or spoil several barrels of the pure liquid.

In the old method the open kettle was hung over a fire in the woods. Smoke and dirt helped, no doubt, to give it the old-time woody flavor of which we are all so fond. Milk and eggs were put in it to clarify the liquid, and even a piece of fat pork was ingeniously hung over the pot to prevent the sap from boiling over. When it had boiled sufficiently it would granulate and harden, and this was tested by dropping a little on the snow, which was almost always present at that time of the year.

To-day better and cleaner methods are in use—spouts that do not rust, pails with lids, modern evaporators, thermometers, and often a neat little sugar house, to protect the workers and the liquid from the cold and dirt.

The old "sugaring-off" time was equal to the vintage time of Italy, the grinding season of the sugar cane in the South, and the corn-shuckings of our Central States.

Granulation is indicated by a temperature of 238° , and at 245° hard cake sugar may be produced. At 219° the syrup will weigh 11 pounds to the gallon, and 100 gallons of sap will produce 82 pounds of sugar.

Any person in the North who is cleanly in his methods, honest, and possessed of the proper amount of business snap can conduct this industry profitably in connection with farm work.

There is, I believe, great possibility of extending this industry to many other parts of this country. The statement is often made that good sugar and syrup can be produced only in Northern regions. All through the mountainous regions of our South the sugar maple will flourish and produce good sugar. Many claim that 12 per cent. can be made on such an investment. A maple sugar bush can be successfully operated in connection with the farm. On almost every farm in mountainous districts there are large areas, if not all of it, which are unfit for cultivation. Such places can be profitably utilized for a maple orchard. The trees may be easily grown from seed, and with care, after the

trees have reached sufficient size, the orchard may be used for pasturage.

In speaking of this industry in The Forester, Mr. N. Williams says: "By over-refining, the sap loses more and more of the uncrystallizable elements, and with them that peculiar tang which is so pleasant to Northern palates—the racy flavor of a product drawn as water from under the

granite rocks and steeple-bush and roots of sweet fern by the vegetable cunning of the sugar tree. The taste gives a pleasure akin to that of using spontaneous bounties like meadow mushrooms or wild native fruit; like breathing the air of mountain summits and drinking at the head waters of rivers."



AMATEUR PHOTO BY D. L. CROSS.

THE UNLOADING OF RAJAH.

Winner of 37th prize in RECREATION's 4th Annual Photo Competition.



AMATEUR PHOTO BY R. O. MEISENBACH.

BREAKING THE RECORD.

Winner of 44th prize in RECREATION's 4th Annual Photo Competition. Zeiss lens.

The shades of Cæsar and Brutus met at the landing, where Charon awaited them.

"Et tu, Brute," said Cæsar.

"Yes. Going over?"

"Yep. I'll shake you to see who goes first." The murmur of the waves was drowned by the rattle of the dice.

"Well, that's one horse on me," said Cæsar.

"Then I win," observed Brutus, pocketing his dice.

"How's that?"

"It's twice you've been stuck."

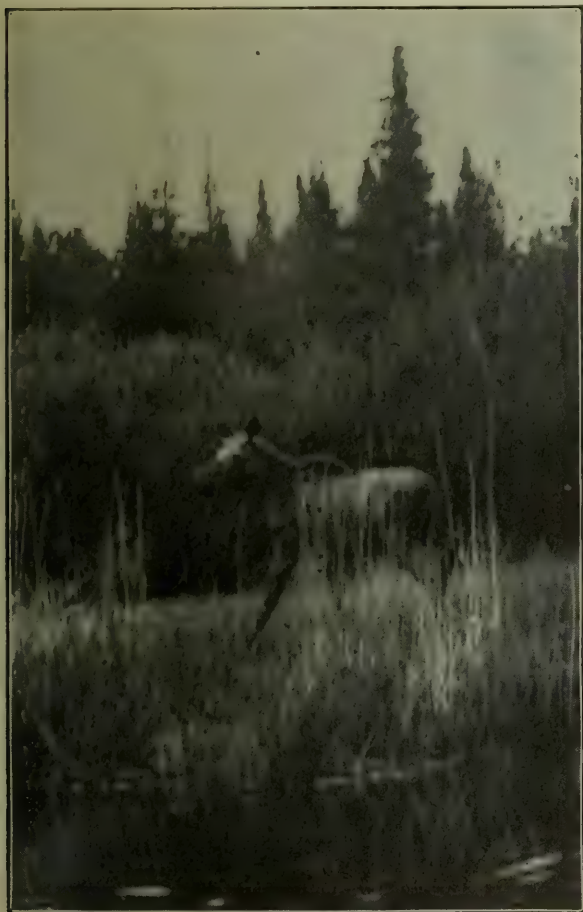
"I rather opine it Styx 'em both," observed Charon, as he unshipped his oars.—
Omaha World-Herald.

HOW DR. HARRISON HUNTS.

W. H. HARRISON.

Apropos of the recent attack on Dr. George E. Harrison, I hand you herewith 2 photographs of live moose, taken by him and Mr. H. Y. Haigh, and quote from private letters written by Dr. Harrison to me:

"A mile farther down the river we found a yearling moose feeding in the edge of the grass. She walked out into the river within 16 feet of us, and gave the moose's peculiar call. Haigh made 2 exposures



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FEEDING IN THE GRASS.

while she was going ashore. She went behind a clump of bushes and stopped; then in a few minutes came out and looked at us. Unfortunately, Haigh had no plate ready at that time, and one of our best opportunities for a game picture was lost.

"A mile farther we found a 2-year-old bull standing among some brush. In an effort to get a better view we frightened him off. He returned in a few minutes, but assumed no position affording a good

picture. We had then gone about 6 miles down the river, and not having left until midafternoon, it was grub time. About dusk we started for home, and had gone a mile when we heard a great commotion ahead. Paddling on quietly, we soon, in the semi-darkness, could see the outlines of 2 moose about 40 yards ahead. They were in about 2 feet of water, were splashing about and throwing quantities of rice into the air. We paddled to within 40 feet of them and could easily have killed them both. It was Haigh's intention to try for a flash light picture, but either because of the close proximity of the moose or the row they were making, he did not light the flash. Suddenly the moose discovered us and stood a moment, like indistinct statues, when there was a wild rush for shore, the moose throwing water over us. These moose were full grown, the bull being very large.

"Within a few minutes we ran within 20 yards of another. It was then completely dark, and we only saw a huge object making for the open river. The noise and size were sufficient to establish its identity. Shortly after that we used the flash light the first time. The plates have not been developed, but we do not expect much.

"We heard another moose and jumped 2 deer before reaching camp. We had no torch with us. The night was the blackest possible; so back we had to go ashore and make birch bark torches in order to get over the rapids, which are now wild on account of high water. All this would, I doubt not, seem improbable to those sportsmen who have fruitlessly pursued the elusive moose.

"In explanation of our great sport (for sport it was, notwithstanding we did not fire a shot) account must be taken of the unusual skill of Ellis Sombs, our guide, as a quiet paddler. Then, too, I have learned something of paddling, and we have been long enough in a moose country to learn much of their habits.

"We reached the lake at 6 p. m., having seen 3 deer and a cow moose. After supper Ellis and I went out with the boat, and soon found a cow moose feeding about 10 rods from shore. She was in the water up to her shoulders. We got within 10 rods of her before she saw us, and succeeded in cutting between her and the shore. We got alongside of her and spanked her gently several times with the paddle. After going half a mile she got into the woods and then let go a series of



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COW MOOSE IN THE RIVER.

roars such as I never before heard from a moose.

"We took some splendid photographs, but got none of game, although at this time we have 5 negatives of interesting specimens of live moose."

Dr. G. E. Harrison's camp on the Big Fork is a model of order, hygiene and comfort. Not a live tree is cut by him or his men, for by precept and practice he is opposed to wanton destruction of forest or game. I have seen him in North Dakota strip and swim a slough having a shifting film of ice to retrieve a goose he had shot. Such a feat would be impossi-

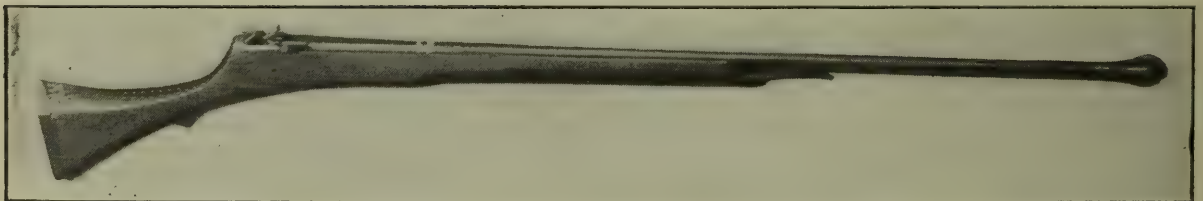
ble to a sportsman bent on spoliation rather than preservation.

Visitors to his camp recognize as his gospel the words of Pathfinder: "My bullet is well leathered and carefully driven down for the time of need. The deer never leaped that fell by my hand wantonly."

I happen to know that those who really want game preserved in the Northwest favor his methods strongly. There are others, who, not able or willing to understand his great love of nature, profess to see in his presence some ulterior motive. Others object to him because he is a menace to their practice of selling moose meat at 3 cents a pound; and this lawless element would object to you with equal venom if you spent your summers on the Big Fork.

I have refrained for a long time from defending Dr. Harrison, knowing you had been furnished the addresses of reputable gentlemen, who know him as he is in camp and with the gun, and believing you would learn the facts and make amends for the injury done him by the publication of the uncalled-for and untruthful attacks by Dr. M. P. Austin and K. C. K. Neither pretends he has ever seen Dr. Harrison, much less that he knows him or his habits.

Much could be said in commendation of Dr. Harrison, but it might seem fulsome praise by me, his brother. I respectfully refer you to any mercantile or his home, or to the New York Press Club, of which he is a member. I trust, however, that I am on excusably modest grounds in writing the foregoing. I believe RECREATION will do what it can to undo the injury which it has unwittingly done Dr. Harrison.



ARABIAN MATCHLOCK.

Octagon barrel 53 inches long, total length 67 inches, caliber .60, peep sights, smooth bore.

THE PACIFIC MINK. *PUTORIUS VISON ENERGUMENOS*.
(Bangs.)

ALLAN BROOKS.

This is the form of mink found on the Pacific slope, from Alaska to California, and is a far larger and more heavily built animal than the typical species inhabiting Northern North America. From the form that occurs on the Atlantic coast (*lutracephalus*), which is also a heavily built mink, it can be distinguished by its darker coloration and cranial characters.

The Pacific mink has nearly the propor-

These Pacific lads seem to have regular migrations, being much more common on the smaller brooks and streams in spring and summer than in winter. As the winter comes on, they move down to the larger streams and lakes and to the sea coast, returning to the small streams in the spring.

Like all mink, they refuse all bait at certain seasons, and this does not seem to



PACIFIC MINK. *PUTORIUS VISON ENERGUMENOS*.

tions of an otter on a small scale, very different from the light, weasel-like form of the common species. The males of the Pacific mink are especially large, a good sized adult weighing 4 pounds. The color is generally a dark, sooty brown, though lighter and more reddish animals are often taken, but never so light as the light colored varieties of the Eastern forms. There is little or no white on lower surface of this Western animal. In only one individual have I seen the whole lower jaw white. Its habits are much the same as those of the Eastern species, but it seems to prefer the lower levels as a rule, seldom being found high up in the mountains.

be governed by the scarcity or abundance of the food supply, as they are more easily trapped in fall and spring than in mid-winter. As a rule, they refuse ducks of all sorts as bait. The best baits are grouse, rabbits, muskrat, and dried or smoked fish.

I have seen this mink chasing a muskrat in clear water. Both animals were traveling at a great rate, about 8 inches under the surface. To my surprise the mink easily overhauled the rat, and would have killed it had I not interfered. Males are much larger than females; so much so that extremes of each sex would hardly be taken for the same species.



"AT THE REPORT OF MY RIGHT BARREL DOWN THEY WENT."

THREE BUSTERS FROM A BLIND.

HERB.

Some 16 years ago, when I was 14 years old, my home was in Virginia, on the James river. Having an inordinate love for sports of both field and stream, and being possessed of an old 12-bore muzzle loader, as also of an aged "yaller" pointer, Minx by name, I passed most of my time in hunting quails, squirrels and cotton-tails, often seeing larger game but never getting a shot.

Three large turkeys, which, the neighbors said, had been ostracised from their flocks, had been together for years, but I never met them until one morning while on my way to visit my traps. As I passed through a neck of pines I saw the tracks of 3 large turkeys in the path. On each side of the path the leaves had been scratched up, showing signs both new and old.

Seeing that the pines were within their range, I thought to myself, "Now is my time to kill a wild turkey;" so after going to my traps I returned to the house, took a hatchet and a small measure of corn, and went back and built myself a pine bough blind, such as I had often seen in the woods while hunting. I drove the corner stake into a rut made by a logging wagon the winter before. I then trailed the corn down the path about 40 yards.

The next morning I found the bait undisturbed, but the following morning showed that the grain had been eaten on the evening previous. The turkeys must roost near. I put down more corn. The next morning it was gone; and such was the case the ensuing 4 days.

The eighth morning found me and my dog reclining in the blind an hour before daybreak. Just before the sun rose I heard the turkeys putting, and the noise of their wings as they flew from their roost a short distance from me. My heart beat hard for an hour or so. I expected every moment to see them come out to the bait. After waiting 4 hours and seeing nothing of them, I left the blind and went home. The next morning I tried again, with the same result.

On the tenth morning, having heard the horn blown for breakfast, and comparing the warm dining room and that hot breakfast with my cramped position in the blind, the freezing cold and the non-appearance of the turkeys, I decided to quit and go home.

Just as I shook the old blanket from me and was reaching for my gun, I heard something coming from behind me, mak-

ing a great rustling through the leaves. Looking over my shoulder through the blind I could see a great gobbler coming toward me. His neck was outstretched and he was running as only a wild turkey can run. When within 10 feet of me he stopped, threw up his head, and seemed to be listening.

I glanced at old Minx. He was crouching and shaking as if with a chill, and the saliva was dropping from his quivering jaws. I believe he was the most excited dog I had ever seen. As I slowly turned the gun toward the gobbler he walked up the other wagon rut, stopped within 4 feet of me, and, raising himself on his toes, tried to look over into the blind.

Just as I decided to jump up and give it to him as he raised he uttered a peculiar guttural call, on which 2 more gobblers ran up and passed him, and at once began picking up the bait some 30 feet from the blind. Gradually putting the gun on to the 2, I at the same time gave a sharp whistle, at which they threw up their heads, almost touching each other, in a direct line with my gun; and at the report of my right barrel down they went.

Old Minx, who had not taken his eyes from the first gobbler, dashed at him through the blind, scattering it right and left. By that time I was on my feet, and the turkey was going up through the pine tops as swiftly as a ruffed grouse; but when the left spoke down he came. Minx then turned his attention to the 2 birds first shot, which were flopping around.

Dropping my gun, I ran to pick up the big one, but when I had him almost within reach he raised himself to his feet. His head seemed as high as mine, and his beard must have come from Kansas. As he stepped off I could see that one of his wings was hanging. Minx came at my call, but the turkey had vanished into the brush. The dog hit his trail and went off on it, catching him in about 5 minutes. I secured the bird and returned for the other 2, but found that all of them were too heavy to carry; so taking the largest I went home and sent back a negro for the others.

It would be false to say I was not "stuck up," or that I did not strut around as proud as any turkey cock for some time thereafter. I have shot a great many turkeys since, but by flushing them and yelping them up. I never got another one at a bait, or one that I feel as proud of; nor, for that matter, one that proved so tough a morsel to chew.



IN THE WOODS OF THE MUSKOKA LAKES DISTRICT.

BY COURTESY OF GRAND TRUNK RAILWAY.

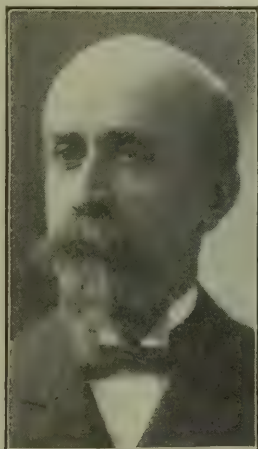
SOME NEW LEAGUE MEMBERS.

It is exceedingly gratifying to know that the best and most prominent sportsmen and naturalists in the country are now showing their appreciation of the work of the L. A. S. by joining it.

Here are names and portraits of a few men who are high in the councils of the nation, who have lately sent in their dollars and have been enrolled as working members of the League.



HON. JOHN F. LACEY,
M. C., Iowa.



HON. B. F. CALDWELL,
M. C., Illinois.

The Hon. John F. Lacey, member of Congress from Iowa, is an old-time sportsman, naturalist and friend of game protection. He tells me that of late his love and his sympathy for the birds and the wild animals has almost overcome his love of sport, and that he now feels little inclination to shoot. He is still fond of the rod and reel, and spends many a day on the water during his summer vacations.

He is one of the most ardent workers in Congress, and has done a great deal in the interest of game protection. As is well known, he is the author of the bill now pending, which proposes to regulate interstate traffic in game through the medium of the Interstate Commerce Commission. He also drafted and introduced the bill for the perpetuation of the American buffalo, and has done valiant service in furthering both of these measures.

The Hon. B. F. Caldwell is one of the most energetic and industrious of the Illinois members. He is forging rapidly to the front as a working member. He is pre-eminently a business man, has ample means at his command, and is not in any sense a

politician. He is a genuine sportsman, a hunter of big game, and has assured me his services may always be commanded in support of any measure looking to the protection of game or of song and insectivorous birds.

Hon. Joseph E. Thropp, member of Congress from Pennsylvania, is doing valiant service for the cause of game protection on the floor of the House, in advocating both of Mr. Lacey's bills. I understand Mr. Thropp will be a candidate for re-election, and if so, I trust every sportsman in his district (the 20th) will vote and work for him, regardless of party lines. It makes little difference what a man's politics are, as long as he is in favor of protecting the fast-disappearing game and the song and insectivorous birds. That is what counts.

The Hon. F. W. Cushman, of Tacoma, Wash., is one of the youngest members of the House, as well as of the League. He is, however, a sincere, earnest man; a hard worker, and is sure to make a name for himself that his friends will be proud of.

Captain Thomas Perry, of the Navy, is now serving as Naval Secretary of the Light House Board, and in that capacity



HON. JOSEPH E. THROPP,
M. C., Penna.

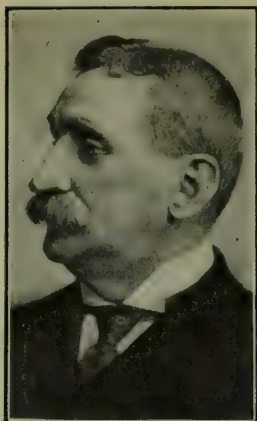


HON. F. W. CUSHMAN,
M. C., Wash.

is rendering valuable service to the cause of game protection. At my request he has recently induced the board to issue an order to all light house keepers and life saving crews to observe strictly the game laws of the States in which the men are stationed. Captain Perry requests that



HON. WILLIS VAN
DE VANTER,
Assistant Attorney
General.



HON. C. VAN COTT,
Postmaster, New York City.

any future violations of the game laws by men in this branch of the service be promptly reported to the board.

Judge Willis Van De Vanter, Assistant Attorney General of the United States, may well be termed a typical American sportsman and gentleman. He is equally fond of the rifle, rod and gun, yet he never destroys life merely for sport. Governor Richards tells me that when hunting in Wyoming last fall he saw 5 deer run by General Van De Vanter, within easy rifle range, and that the General did not fire

at them because he could not see horns on either of them. At the same time the camp was without fresh meat.

Later, on the same trip, the General killed a bull elk and declined to shoot at another, though subsequently he saw several with better heads. There is true, high minded sportsmanship for you!

And good, stalwart Cornelius Van Cott has joined the League, too. Every one knows him as the Postmaster of the City of New York. And he is giving us the best postal service we ever had. He does not say much about his accomplishments as a shooter or an angler, but he is fond of the woods and of the wild creatures that inhabit them. He wants to see these preserved, and that is why he is with us.

When such men as these are willing to put their shoulders to the wheel and aid in the great work the L. A. S. is doing why on earth should anyone else hesitate? Yet there are a million men in the United States who pose as sportsmen who have not yet shown their willingness to aid in this great work to the extent of \$1 a year! It is now time for every man on this continent who loves Nature and her works to join this League and aid in saving the birds, the mammals, the fishes and the forests from threatened destruction.

Send in your application *at once*.

CAUGHT BY ACCIDENT.

Several years ago, when fishing in the Gunpowder river, I pulled out a white perch hooked in the manner shown in the accompanying photo. My idea is that the fish had already taken a hook from some former angler, had missed being hooked

by me, and that my hook, slipping along the snood in its mouth, caught in the loop of the hook already embedded there. This photo was not taken at the time, but only reproduced to show the manner of hooking. Wm. H. Fisher, Baltimore, Md.



AMATEUR PHOTO BY WM. H. FISHER

A PERCH HOOKED IN GUNPOWDER RIVER, MARYLAND.

CAMPING ON THE TONGUE RIVER.

J. H. AGER.

The suggestion was well received; we talked the matter over; all 4 families lived in the same block, and the details were soon agreed on. A new and commodious compartment tent, a kitchen tent, an outfit of Gold Medal folding camp furniture, made at Racine, Wis., together with a liberal supply of groceries, were purchased. Shot guns and target rifles were cleaned and cased, shells loaded, reels and lines overhauled and put in order, and a quantity of brown and gray hackle, coachman, professor and white miller trout flies laid in.

It was 6 o'clock on the evening of July 19th, 1899, when we boarded the Burlington train for Ranchester, Wyoming, where we were to leave the railroad and continue our journey in wagons. Our party consisted of a banker, a city officer, an insurance man and a railroad employee, each being accompanied by his wife. With us were also Chester, my 13-year-old son, and Edie, the accomplished housekeeper, whose authority in camp was never questioned, and whose cooking rarely failed to evoke praise. Sometimes it led to gormandizing.

The ride from Lincoln, Nebraska, to Ranchester, Wyoming, is one of interest. The few hours of daylight left us on the evening of our starting revealed Eastern Nebraska as a sea of corn, wheat and pasture, broken with islands of trees, in which were nestled cozy homes peopled with prosperous and contented occupants. The next morning we breakfasted at Edgemont South Dakota. On resuming our journey we skirted the Southern end of the Black Hills, entered the coal and oil fields of Wyoming, and passed through the Bad Lands, which in turn gave way to the rich irrigated valleys and well stocked ranches lying North of and parallel to the Big Horn mountains.

With proverbial promptness, the Burlington sat us down at Ranchester on time, a little after 2 p. m. By previous arrangement, Tom Davis, the mountaineer, teamster and guide, was at the station to convey us to the mountains which, although appearing not more than 2 miles away, are in reality 9 miles distant. With several hours of daylight before us we speedily bundled ourselves into his spring carryall, leaving him to follow with our belongings loaded on his big 4-horse mountain wagon. A delightful ride of an hour took us to Dayton, a small village on

the banks of Tongue river, at the base of the foothills. The Hotel Davis, well managed by the little daughter of our teamster, was our refuge until the next morning. The evening was spent by the ladies in strolling about the village and beside the river, while the male members of the party bought some additional supplies at the store.

The next day was devoted to the selection of a site and establishing camp. Through the kindness of Mr. George Milward and sons, who owned the land and in honor of whom we named our camp, our tents were pitched in a grove of large trees on the bank of Tongue river, about half a mile from where the stream emerges from the mountains and begins its journey through the valley to the North. Our first night in camp found us at peace with all the world.

What a beautiful view was ours! with a mountain stream of unrivalled beauty flowing past our door, its clear, cold waters laughing, dancing and leaping over their rocky bed to join the far-away Yellowstone, making perpetual music without note of discord; with lofty mountain peaks towering above us, their sides adorned with great pines and evergreens and vari-colored smaller growth, or seamed and scarred by convulsions of inconceivable force that must have made a continent tremble. The sunrise was splendor, its setting was transcendent beauty, whose glories neither pen nor brush can depict. Except during 2 or 3 hours in the early afternoon, when we sought the hammocks, conveniently hung in the shade of the trees surrounding camp, the days were pleasant and the nights always cool enough to make blankets a necessity. How we slept! In middle life we were permitted to again enjoy the dreamless, restful sleep of childhood; and after such a night, a bath in the melted snow of the river and a breakfast eaten with camp appetites, care was a stranger and living a delight.

We found much enjoyment in contriving numerous articles for comfort and convenience about the camp. With the aid of a few spikes, a rake was manufactured and our door yard tidied to a degree of neatness surpassing many a city lawn. Benches, shelves gun racks and cupboards were improvised, everything was assigned a place and a fine was imposed on each one failing to return to its proper place,

after using, any article belonging to the camp. The women cherished a broom which they evolved from juniper twigs and various utensils which they manufactured from birch bark for table use. Fresh bouquets of wild flowers adorned our dining table, and when our granite ware service was placed on the white oil cloth we admired the spread and congratulated one another on its possession. At the point opposite our camp the river was about 80 feet wide and one to 5 feet deep. Two days were consumed in contriving and building a foot bridge, which proved a great convenience, and became a favorite lounging place.

The women wore short woolen skirts, shirt waists, broad brimmed hats, heavy soled shoes and leggins, while we men enjoyed the luxury of flannel shirts, sweaters and hunting boots. The woods abounded in berries and wild fruit, and their gathering made pleasant diversion and added an agreeable variety to our daily menu. Neighboring ranchmen and their wives paid us frequent friendly visits, and from their irrigated gardens we replenished our larder with fresh vegetables and luscious strawberries, while their dairies and poultry yards furnished us a bountiful supply of fresh, sweet butter, milk, cream and eggs. Without exception the kind hearted people living in the vicinity showed a desire that our visit should prove enjoyable, and their hearty good will added much to the pleasure of our stay among them.

No more beautiful stream than the Tongue river can be found in the mountain regions of the West, and the canyon through which its waters tumble their way out of the mountains is, while less massive and awe inspiring than the Royal Gorge or Black Canyon in Colorado, even more picturesque and beautiful than they. Its verdured walls, many hundreds of feet in height, are crowned with gigantic rocks which the elements in untold centuries have fashioned into wonderful imitations of monuments, amphitheatres and castle ruins. The river abounds in brook and rainbow trout, and but little time was required to provide our table with all the toothsome fish we could use in camp or present to our neighbors who found no time to whip the stream. Some of us had previously fished in the Gunnison in Colorado, the Skykomish in Washington, the Wood in Idaho, the Flathead and Lake

MacDonald in Montana, and the brooks of Vermont and Wisconsin; but in none of them except Lake MacDonald have we found trout more gamy or plentiful or of a larger average size than those of the Tongue river, with its environment of rugged and beautiful scenery.

In the valley willow grouse were plentiful; while blue, or mountain, grouse, with flesh as white and savory as that of the quail, frequent the higher altitudes and love the shelter of the pines growing on the mountains. Within $\frac{1}{2}$ a mile of our camp was a deer lick, and bear and elk inhabit the whole Big Horn range. A pair of saucy little squirrels grew familiar with us, and at each meal waited impatiently for our table crumbs, while numbers of magpies, with galloping flight and fretful scoldings, hovered near us all day. It was wonderful how quickly, under the stimulus of the pure air and out-of-door life, appetites and strength increased. Mountains that we at first pronounced too steep and high to climb were ascended without difficulty later. Each day brought a change of programme. Fishing, hunting, berrying, mountain climbing, gathering flowers, taking views and lounging in camp in easy chairs and hammocks were all ours, and we enjoyed them to the fullest. Target practice with .22 caliber rifles became a popular amusement, and in these contests the true aim and steady nerves of the women won for them many records which, in comparison with those made by the sterner sex, amply justified the chaffing that followed. The day's enjoyments reached their climax when, under the ample awning of our dining room, the evening camp fire was lighted. Then it was that the day's experiences were related, stories told, plans for the morrow made and jokes indulged in, while songs and instrumental music awoke latent echoes in woods and mountains near and far.

When the time arrived for breaking camp and returning to our city homes, it may have been imagination, but it seemed as if the music of the water on that last morning was more subdued and filled with minor strains; that the eyes of our saucy little squirrels looked regret for our parting, and that the querulous notes of the magpies were changed to protesting farewells. As we turned our faces homeward we realized how fully our beautiful surroundings had contributed to the pleasure of our short stay.

The finest days in all the year,
With strange perversity appear
Just when we have, and can not shirk,
Some hideous job of undone work!

—Detroit Free Press.

A MOUNTAIN HUNT IN OREGON.

STANLEY HERBERT.

I had the good fortune to receive an invitation for a few days' hunt in the heart of the Coast Range mountains. I reached the home of my friend late one evening in September.

Preparations for the hunt were begun almost immediately; guns were cleaned, and ammunition prepared; while the dogs and ponies were tied up, and packs made. The hunting ground selected was several miles away, and soon after noon of the following day we started.

As we wound around the mountain side our cavalcade presented an interesting appearance. At the head rode my friend Will, on a little sorrel pony, his rifle across the saddle in front of him, his feet nearly touching the ground on either side, due to the fact that the pony's legs were exceedingly short and his exceedingly the opposite. Both in front and behind the saddle were packs of provisions and camp equipage. The other pony was similarly accoutred, and behind soberly trotted Watch, the trusty old black and tan deerhound; while Suze and Sooner, 2 more, scampered playfully along.

Soon we left the road and entered a narrow trail. Overhead the boughs intermingled so closely that it was dusky even in midday, owing to the thick growth of Salal bush. As we proceeded, the path rapidly grew steeper, and when we reached the clearing above the brush and timber, we saw we had begun the ascent of the mountain.

It became so steep we could barely stay in the saddles, so, dismounting and securely fastening our packs, the ascent was continued on foot. Will took the lead and behind him came the ponies, who were familiar with that kind of travel, and readily followed without leading; the remainder of the expedition brought up the rear.

As we neared the summit, the fog, that almost continually envelopes the mountain tops, began to close in and shut off all view we might have had from that elevation. In descending the other side, the brush again made its appearance, and then the heavier timber. It was quite dark ere we reached our camp, an old shack used only by hunters as shelter against the mountain fogs and storms.

The ponies were unpacked and turned loose to graze. A few cedar splits taken from the side of the building served as fuel, and a bright, crackling fire soon lighted up the old building and sent bright

gleams out through the chinks in the wall. A camp fire supper is soon prepared and eaten, and we lay down to a good night's sleep.

The dogs awoke us long before daylight had found its way into the secluded canyon. Breakfast disposed of, we took our rifles, chained the dogs to ourselves and started for the scene of the hunt.

As we went through the timber along the creek we noticed marks made on the trees by bears. In climbing the chittem trees to secure the berries, they tear long slits in the bark with their claws. Their tracks were numerous in the soft clay, but as they were several days old they were of little interest.

When we emerged from the woods and started up the hillside, our troubles began in earnest. The fern grows to a size almost incredible, the stalks being $\frac{1}{2}$ to $1\frac{1}{2}$ inches through and 10 to 20 feet in height. If we went on one side of the stalks, the dogs, of course, went on the other, and that necessitated a stop and untanglement.

However, we finally reached the top, where the fern was not so thick, but were compelled to wait some time before the fog raised sufficiently for us to select our stand. One of the dogs was loosed and quickly disappeared down the hillside, to be heard at intervals giving his whining bark, telling he had not found a satisfactory track.

A large fallen tree served as my vantage point. It lay on a little knoll, overlooking a woody canyon, in which old Watch could occasionally be heard. Presently he started a deer. His yelps, coming in quick succession, echoed from the mountain side until lost to hearing in the distance. The chase circled round in the timber for some time, but soon the dog's voice became clearer, and we knew the game was somewhere on the hillside. Every eye was strained to catch sight of it; not a move in the fern was missed, but the alert deer crossed the ridge without showing itself above the fern.

We were, of course, disappointed, but it could not be helped. The other dogs were loosed and their notes rose and fell alternately until lost in innumerable echoes.

Another deer was started, and presently made its appearance on a little knoll about 500 yards from where Will was stationed. It halted a moment as if undecided what to do, but a shot from Will's 40-60 sent it

down the hillside, bounding high at every leap. A second and third shots followed in rapid succession, and with an unsuccessful attempt to clear some fallen brush the deer fell in a lifeless heap.

The game proved a spike buck. One

of the dogs ventured to creep up and lick the blood from the deer's nose, but a warning growl from Watch sent him hastily back. The deer was quickly prepared for packing, the dogs given their share, and the hunt for that day was over.*

AN APPEAL FOR THE BUFFALO BILL.

HON. W. D. JENKINS, SECRETARY OF THE STATE OF IDAHO.

I want to add a word in support of Lacy's House Bill No. 6,062 and urge its adoption. In doing so I must make the humiliating confession that I was one of the number who, in the early '70s, on the plains of Western Kansas and on the Cimeron in the Texas Panhandle, assisted in the ruthless slaughter and extermination of those grand old monarchs of the prairies, the American buffalo. Well do I remember how, at a single stand, with our "big .50s," we would cut down 50 to 100 of these noble animals, whose hides and horns were taken, and the remainder of the carcasses left on the prairies to bleach in the sun or afford food for the ravenous coyotes. Our party consisted of 3 hunters, "one of whom I was which," together with skinners, cooks and teamsters, about 30 in all. In the winter of '71 and '72 we collected 3,000 skins. Ours was only one party of many engaged in this unholy depredation. The question of the final extinction of the buffalo was frequently discussed around evening camp fires, and it was generally admitted that at the rate of killing then going on the buffalo would become, within 50 years, not extinct, but scarce and difficult to secure. My first recollection of the buffalo dates back to 1859, when they roamed the region then known on the maps of all school geographies as the Great American Desert, in almost countless millions. For miles and miles, as far as the eye could reach over a level plain, the surface of the earth seemed literally covered with this black, moving mass of noble animals. It was not until in the early '70s that the buffalo were taken for their skins alone. Prior to that time they were hunted by the Indian, the emigrant and the frontier settler solely for food and robes. In looking back now it seems strange there was not sufficient foresight on the part of our lawmakers in Con-

gress to protect and preserve at least a remnant of this horde of America's greatest game. Personally, I have many times, in maturer years, felt the humiliation that should so justly attach to those who participated in its wholesale slaughter and destruction. The buffalo I have taken in the chase, when, mounted on fleet ponies, we rode miles, up hill and down, through prairie-dog towns and over shallow streams, and with trusty carbines finally brought the noble game to his knees, were the fruits of genuine sport. Had that method of taking the buffalo been the only one resorted to these splendid animals would yet remain in the sparsely settled regions of the West.

All honor is due Col. J. C. Jones, "Buffalo Jones," for the interest he has ever manifested in preserving specimens of this American game that would, were it not for his fostering care, long since have become extinct. Let every sportsman in the land urge the passage of the Lacy bill. The vast herds cannot be restored, but magnificent specimens of the noblest species of wild game may yet be preserved. Specimens of these should be in all the large parks and zoological gardens of the land.

Let us push House Bill 6,062. Should it pass, I have promised myself a trip all the way to the proposed reservation in Southeast New Mexico for the purpose of personally thanking Buffalo Jones for his grand work, and for the further purpose of apologizing to the surviving descendants of that superb race of animals that I, in the exuberance of youth and indiscretion, at one time aided, assisted and abetted their extermination.

*You should not hunt deer with dogs. Nearly all States prohibit this by law, which shows the sentiment of the best sportsmen on the subject.—EDITOR.

A HUNT IN ROUTT COUNTY, COL.

DR. E. W. WAGONER.

On the morning of September 8th, 1894, 6 of Emporia's big hunters, or, at least, hunters who had big game in their eye, left the station over the Sante Fé for Routt county, Colo., where there was a promise of shooting antelope, mountain lions, deer, elk and bear. An uncle of Marshal Starr lived in that good hunting district and had the reputation of possessing more bear scalps than any other hunter in that country. With that excellent guide the crowd expected to each kill a bear, elk, lion and all the common game they wanted. Marshal had taken 2 trips to that place in previous years, killing game that gave him an enviable reputation with the boys, and with his company we were sure of a fine time.

Arriving at Leadville, several of us enjoyed for the first time the delightful freshness of that altitude. There, poised on the brink of mountains, are smelters whose sulphurous fumes may be smelled for miles. After night the long flames seen issuing out of the flues remind one of the aurora borealis or suggest Dante's Inferno. Climbing up the divide with 2 engines, doubling on our path until we occupied the fourth track on the top and could look down and count the other 3, we reached the top of the Rockies and glided down the mountain slopes as down a toboggan slide. We were in Rifle by midnight. There we were to take wagons for 115 miles to Mr. Brown's, Starr's uncle.

The following day at 4 p. m. we were on a wagon, with 1,000 pounds of baggage, starting North for our first camping place, which we reached at 8 p. m. Everyone was tired and hungry, and when oysters were set before the crowd for a starter the look of surprise that went around might have done everything else but talk. The boys all wanted to pay more than the 50 cents charged for that supper; at least those did who had not seen any penny ante on the train. After a smoke and a social chat each fellow took his blankets and found a spot by the side of a haystack big enough for himself and his feet without moving the barnyard fence. We were all soon lulled asleep by the chattering coyotes, who seem to think every night is their night out. We bade adieu to Wolf's ranch and their gracious hospitality the following morning and pushed ahead as far as we could before night. In that country camping places are located by the water supplies and horse feed or grass, if

parties do not carry hay with them. At 8 o'clock that night we reached Axtel, a little cabin and postoffice in the Axtel basin. The one who could put on the most despairing look was selected to state our wants to the kind woman in charge, who, after several refusals, decided to give us bread, butter and coffee and the privileges of the hay yard. No time was lost in rolling up in our blankets, and our night's rest would have been everything hoped for had it not been that George Jones attracted a skunk about 2 a. m. It seemed that Jones understood how to handle his visitor, for after it had crawled about his head, smelling of him, it left without presenting its compliments. Jones said he knew he must not move or he would create a disturbance that would last throughout our trip.

After a hard day's travel through canyons that seemed once the walls of a mighty avalanche and up mountains that looked impossible of ascent, we anchored at Craig, 4.30, and set about getting our supplies, for that was the last trading place. We found Starr's uncle dangerously sick and his team, with which he intended meeting us at Rifle, in the barn. Dismissing our driver, we loaded our stuff for the ranch, 14 miles away. That distance in the mountains means at least twice that far on the prairie or level country.

Eight o'clock found us in sight of the ranch. As we mounted the hill a fine buck antelope jumped up and was soon laid low by J. W. Lostutter. The camera was brought out and "Antelope Dick," from this incident, was secured, wound on the spool of films and put away for another day. We were glad to reach the cabin, but the condition of Mr. Brown worried all of us.

The next day we all hunted antelope and had much sport chasing and taking snap shots at them on the run. Some remarkable shots were scored, and of course they were always intentional.

Sunday every preparation was made to leave the cabin early the next morning. It was intended that as soon as Mr. Brown recovered he should join us. At 9 o'clock Sunday night a mounted messenger brought the news that Mr. Brown was dead. Marshal Starr drove in that night and returned the next morning with a spring wagon, in which he took back James Thompson, myself and a nephew of Mr. Brown to attend the funeral.

Two days later the start was made, but before we left the barn yard Thompson was led in by a neighbor, who was going to join the party, with his face covered with blood. Jim knew nothing until the following morning, being delirious all the time. He had fallen under his horse, which was a tricky one, that had reared up and fallen backward.

The next day we started, with Jim in a covered wagon on a spring seat. Our camp was pitched by a beautiful stream, hunting parties were made up and separated at once. The first day resulted in locating the trout and taking care of one buck that had strayed too near. The first night around our camp fire seemed to revive within us every tale of truth or fiction ever known to us, and each fellow had his chance. If a man was not good at disposing of his tale he always had plenty of help, usually much to his chagrin. The second day took us up about a favorite hunting spot familiarly known as Bears' Ears. There deer and elk were often seen, but for us a whole day's hunt did not reveal an elk, for which we were so anxious. Night was about to overtake us 8 miles from camp with nothing to eat, but I persuaded the boys to start for camp. On our way a number of deer were scared up and one large buck was selected to take to camp. Starr used a Ballard rifle that shot

a cartridge about the length of a lead pencil. He told Lostutter to shoot first, and after he got through he, Starr, would get the buck. At the crack of the gun the deer bounded away and came up on a rise 50 yards distant. Starr raised his Ballard and fired, and it was plainly seen that he had hit his game. Twenty yards from the spot lay our deer, claimed by both men, as they had both aimed at the same spot. As a friendly quarrel was all the conclusion they could come to, it was decided I should find the bullet next morning. I did so, in dressing the deer, and thus ended a dispute such as often brings men closer together. It was Starr's deer.

A 2 days' trip was planned to hunt elk up in the big timber, and a herd of 11 was seen, but only one bull. After 4 loads of .40-82 he was persuaded by Thompson and Co. to "lay to." That was the only elk secured on the trip. A pitch of a coin for heads or tails was to decide who should take the head, and Thompson, with his true Scotch luck, won it. After 2 days more of hunting deer and antelope and fishing, we broke camp, returned to the cabin and thence to our homes, laden with venison, an increase of about 10 pounds apiece in flesh, 70 exposures of film, and an experience that will ever be green in our memories.

"I'm going to get married," he said, as he placed a hand as large as a Dutch cheese on the counter, "and I want a wedding cake."

"It is customary nowadays," said the confectioner's pretty assistant, "to have the materials of the cake harmonize with the calling of the bridegroom. For a musician now we have an oat cake; for a man who has no calling and lives on his friends, the sponge cake; for a newspaper paragrapher, spice cake, and so on. What is your calling, please?"

"I'm a pugilist!"

"Then you'll want a pound cake."—Tit-Bits.

FROM THE GAME FIELDS.

MORE TROUBLE FOR POND.

There are several Ponds in this neck of woods. One of these is A. E. Pond, chief warden of the New York Division of the L. A. S. He is made of the right kind of stuff. Then there is J. W. Pond, of Malone, who for too long a time has held down a chair in the office of the Fish, Game and Forestry Commission at Albany. All this time he has drawn a fat salary. That's what he's there for. All this time he has talked about protecting the game and fishes of the State. He has told what he had done and was going to do. Also what others have not done—especially the L. A. S. Incidentally Me Lone Pond has really done a few things. But a history of what he has threatened to do and has not done would make a bigger book than Webster's Unabridged.

And now that his days in office are numbered Me Lone Pond waxeth hot because an officer of the League has called him down. He has used up a lot of State stationery and some hours of the time of a State stenographer in formulating a long letter to the Sun. In this he tells how he is the whole show; how he has prosecuted all the game-law breakers that have been reported to him and that could be successfully prosecuted.

Mr. Hornaday, Ernest Seton Thompson, Mr. Boardman and Thomas Cary Welch have answered this Roily Pond, and called him down as to the case the League made against the Iroquois Hotel, in Buffalo, away back in '98. The first 2 have shown that they identified the piece of steak which Local Warden E. P. Dorr bought at the Iroquois and sent here as venison. They have stated over their signatures that they identified it by the bit of skin and the few hairs that hung thereby. They have reminded this Albany-Malone Pond that they were ready to go on the stand and swear the aforesaid was venison, and that they are still ready to so swear.

All of which I wrote this North-Woods Pond at the time, but he declined to prosecute.

Mr. Welch has written the editor of the Sun that he assured the Lone Pond there was a good, clear, strong case against the Iroquois; but still this Chief Protector of Game Law Violators declined to prosecute.

And now comes Mr. Welch and stacks the cards on this same Pond again. Will he play? Or will he stay out?

The following correspondence explains itself.

Buffalo, March 19th, 1900.

Editor RECREATION:

I was surprised and interested to read Mr. Hornaday's letter in yesterday's Sun. It was the first I knew of the controversy. By good luck I managed to get a copy of the Sun of March 12th, and was still more surprised to find that Mr. Pond had so wofully misrepresented me. I have therefore prepared a letter to the Sun, which you may have published if you see fit, in which I have set myself right and have set him back a few.

I am also sending you copies of correspondence had with Mr. Pond in regard to another matter, which may prove interesting and serviceable in this connection; to-wit: The case of Mang and Perry. Nothing has ever been done in this case, as far as I know. I am writing Mr. Witmer today, and will give you his answer. This strikes me as about as flagrant and wilful a neglect of duty as is possible. Mr. Worts called on me in January, talked the matter over, and promised to attend to it; but as far as I know that was all he ever did.

Yours sincerely,

Thomas Cary Welch.

Buffalo, N. Y.

Editor the Sun.

I have just read the letter in your issue of March 12th, signed by J. W. Pond, in relation to the Buffalo hotel venison case. As my name is used in connection therewith I deem it proper to set forth the actual facts. They are these:

My attention was called to the fact that the hotel in question was serving meat under the name of antelope in defiance of the law, and in spite of the fact that a copy of the law had been sent to the proprietors, and that on Thanksgiving day they were warned personally. I invited 2 gentlemen to lunch with me there, obtained a copy of the bill of fare, on which antelope steak was set forth as one of the dishes, and ordered it. We each of us ate a portion, I paid for the same in the presence of 2 gentlemen, making a copy of the bill which was verified by them, and we brought away a piece of the meat. This was carefully wrapped up, marked for identification and sent to New York, as has been stated, for scientific testimony as to its character. At the same time precautions were taken to preserve the chain of evidence so that no possible question could be raised by the defendants on the trial as to the identity of the specimen. Mr. Pond was afterward requested to authorize or begin the prosecution of the hotel proprietors, because we had at our disposal no

funds with which to carry on a litigation which was sure to be sharply contested. We, moreover, felt that it was the duty of the proper officials to take action after the evidence was presented to them.

In a letter to Mr. Pond, dated December 3, 1898, I used the following language: "Yours of the 31st received, and am much obliged therefor. We have a good case against the proprietors of the hotel, and I would like your advice as to the best methods of procedure. It will do more good to get a case against this house than against a half a dozen smaller fry, and it will prove to the public that we are sincere in our crusade. Ordinarily I should be afraid of going to the jury with a case of this kind, but I feel that in the present instance it may be better. Kindly let me know what you think best to do."

Mr. Pond came to Buffalo and had an interview with me. I told him I considered it bad policy to get into court with this class of cases unless one was sure of winning, as the moral effect of defeat was to encourage the law breakers. I did not, however, tell him I considered the case against the hotel in question weak. It will be seen from my letter and from the facts stated that my opinion was quite the opposite.

Mr. Pond was afterward introduced to one of the hotel proprietors by me, and had an interview with him at which I was not present. Not seeing Mr. Pond again I wrote him a few days afterward asking what had been done and what he wished me to do, and in reply received the following letter, from which I have purposely erased the names:

Albany, N. Y., Dec. 30, 1898.

Dear Sir:—Replying to your letter of recent date: The interview I had with Mr. W. was quite satisfactory, as he appeared very gentlemanly and professed that they had no desire to break any laws. He claimed ignorance of the repeal of Section 249, and the younger brother assured me that when Mr. D. informed him it would be illegal to handle venison after the 20th, he did not know that the law applied to antelope. I think perhaps that if a demand was made on them they might pay a penalty, but from an understanding I have had with Commissioner H. I do not feel that it would help the situation by exacting them to pay under the circumstances. We are asking the papers as far as possible to announce that under the present law no game can be lawfully handled after the last day of this month. * * *

Yours truly,
J. W. POND, Chief Protector.

Comment is unnecessary.

Yours truly,
THOMAS CARY WELCH.

Buffalo, April 10th, 1899.

Mr. J. W. Pond,
Chief Protector,
Albany, N. Y.

Dear Sir:—I received a call on Saturday from a gentleman who owns a home on Niagara river, near La Salle. He states that some men in the vicinity are persistently and continually using a seine, and that he had been a witness to it. I asked him whether he had any other witnesses, and he replied that he had not; but that he owned a cottage commanding a view of the dip and that if a protector would conceal himself therein he would doubtless in a short time be able to obtain the necessary evidence and catch the men in the act.

If I remember correctly you told me you were going to send a man here this spring who was an adept, and that you would have him call on me. It seems to me that would be a first class case for him to begin with.

Yours truly,
Thomas C. Welch.

State of New York, Fisheries, Game
and Forest Commission.

Albany N. Y., April 11, 1899.

Mr. T. C. Welch,
Buffalo, N. Y.

Dear Sir:—Am in receipt of yours of the 10th, giving information as to what you recently learned from a prominent person owning property on Niagara river, near La Salle. One of the Protectors that I had in mind when talking with you I am to meet in Syracuse Thursday of this week, and after he has completed a certain amount of detective work that he has been called to do, will have an understanding with him about calling on you and trying to adopt some plan of action to break up illegal fishing along the river.

Yours truly,
J. W. Pond,
Chief Protector.

Buffalo, April 11th, 1899.

Mr. C. F. Witmer,
Williamsville, N. Y.

Dear Sir:—I inclose herewith copy letter received from Chief Protector Pond, regarding the matter of which you spoke to me. It explains itself. When the man gets here I will communicate with you.

Yours truly,
Thomas Cary Welch.

Williamsville, N. Y., Dec. 16th, 1899.
Messrs Cary & Welch,
Buffalo, N. Y.

Dear Sirs:—Last spring I called at your office and made complaint of illegal fishing being done by Mang and Perry at La Salle. Soon after you sent me a letter to your Mr. Welch from J. W. Pond, Chief Protector at Albany, N. Y., in which he

represented that he would take measures to break up the business.

I am convinced that these parties have not been interfered with, but are still doing a prosperous business. They have about ruined the reputation of La Salle as a desirable place for angling.

It seems as though political influence or some other pull enables these men to violate the game law with impunity.

Yours respectfully,

C. F. Witmer.

Buffalo, December 20th, 1899.

Mr. C. F. Witmer,

Williamsville, N. Y.

Dear Sir:—Yours of December 16th received. I am inclined to agree with you in your inference as to why nothing has been done in regard to Mang and Perry.

I have made copies of my correspondence with you and with Chief Protector Pond and have mailed them, together with a personal letter, to Governor Roosevelt. I trust that it will be productive of results.

Yours truly,

Thomas Cary Welch.

Buffalo, Dec. 19th, 1899.

Hon. Theodore Roosevelt,

Executive Chamber,

Albany, N. Y.

My dear Governor:—For the past four or five years I have tried, as far as I could, to assist in the cause of fish and game protection in this neighborhood. While I am not Utopian, I really believe that more can be done than is being done in this direction for Niagara river, and as I know your position on the subject, I am submitting to you herewith some correspondence in regard to a matter of illegal fishing on Niagara river, which I think deserves your attention. I have personal knowledge of the fact that no protector was ever detailed for the purpose mentioned, and the letter received from Mr. Witmer yesterday shows that he is of the opinion it is politics and not protection.

I should like to have an outside protector sent here to investigate this matter. Mr. Witmer owns considerable property, has a high standing in the community, and as far as I know has no axe to grind.

Yours respectfully,

Thomas Cary Welch.

State of New York,

Executive Chamber,

Albany, Dec. 20, 1899.

Mr. T. C. Welch,

Buffalo, N. Y.

Dear Sir:—I am directed by Governor Roosevelt to acknowledge receipt of your letter of December 19th, and to thank you

for the same. He has referred it to the Fish and Game Commission.

Very truly yours,

William J. Youngs,

Secretary to the Governor.

And now the Pond is roiled:

Albany, N. Y., Dec. 21, 1899.

Mr. T. C. Welch,

Buffalo, N. Y.

Dear Sir:—I wish to ask you as a sportsman, not as an attorney, what, if anything, can be done more than is being done along the Niagara river to better protect with the present force of protectors that we have for the entire State, viz., 36, and with the state of affairs that has existed with the courts in that locality? When you assert that you have personal knowledge that no protector was ever detailed for the purpose mentioned, viz., the investigation of a matter referred here by you in the early part of the summer, you are mistaken.

Certainly 2 protectors outside of that locality were asked to and did special work there at several times during the past season. I feel like defending the Fisheries, Game and Forest Commission when unnecessarily assailed, and with the very insufficient funds for protectors and the meagre amount paid them for expenses, that more is being accomplished than by any other department in the way of enforcing laws.

Very truly yours,

J. W. Pond,

Chief Protector.

Buffalo, N. Y., Dec. 27th, 1899.

Mr. J. W. Pond,

Chief Protector.

Dear Sir:—Yours of 21st received. I am sorry I can not give you any definite answer to your question as to how the fish in Niagara river could be better protected, as I am entirely ignorant what work is being done, or the manner in which the protector goes at it.

Concerning the matter mentioned in my letter to Governor Roosevelt, if your protectors do not attend to cases which are actually shoved under their noses they must expect to be criticised, and in regard to their not obtaining convictions in our courts, I believe the courts are unfriendly because they have come to regard the protectors as often unreliable and untrustworthy. Moreover, it has frequently occurred that the protectors have attempted to obtain convictions on evidence which, irrespective of its character, was entirely insufficient to justify a conviction. I obtained 33 convictions out of 37 cases, for violations of game and fish laws, not through any brilliancy on my own part, but because I had proper evidence pro-

cured and prepared beforehand, and the work of getting this evidence in proper shape was always much harder than obtaining the conviction.

It strikes me that nothing would be easier than for a competent man to take 2 witnesses, avail themselves of the use of Mr. Witmer's house, which is so freely and kindly offered, and wait there until the violation occurs; then the culprits can be caught red-handed, and I will guarantee there is no court which would dare to acquit in such a case.

I offer you my services free in any matter which may be brought to me in this way. If your protector thinks he has a case against anybody, let him come to me with his evidence and witnesses, and if I deem his case is faulty I will point out to him where and just how to strengthen it, if possible. If he will then obey my orders in regard to getting the evidence you may have any lawyer whom you may choose try the case and you will get conviction. I do not myself, in any event, believe in bringing actions which are not substantially founded, but I do not consider that it is any excuse for your protectors to decline to investigate a case like the one Mr. Witmer has now twice presented on the ground that convictions are hard to obtain.

Yours truly,

Thomas Cary Welch.

Albany, N. Y., Dec. 28th, 1899.

Mr. T. C. Welch,

Buffalo, N. Y.

Dear Sir:—I am willing to admit that the acts of ex-Protector Pomeroy in prosecuting violators of the game law were quite successful during the early part of his term of office; but as he crowded matters too closely* and went into technical violations too deeply, the courts and all concerned, except a few who were prodding him on, became disgusted; the result of which is that the present protector or an angel from above could not prosecute successfully. Asst. Chief Protector M. C. Worts is in Buffalo for a few days, and will undoubtedly call on you.

Very truly yours,

J. W. Pond.

Chief Protector.

Buffalo, Dec. 28th, 1899.

Mr. C. F. Witmer,

Williamsville, N. Y.

Dear Sir:—I enclose herewith copies of correspondence in regard to your matter, which I think will prove interesting.

I agree with you that there is altogether too much politics in this business. However, I think we have the Department on the run now, and possibly they will feel

* Was he dismissed for being too severe on law breakers?—ED.

it incumbent on themselves to do something.

Yours truly,

Thomas Cary Welch.

Williamsville, N. Y., March 21, 1900.

Mr. T. C. Welch, Atty.,

Buffalo, N. Y.

Dear Sir:—Your letter to Governor Roosevelt seems to have stirred up the officers, for soon after that I had a call from Mr. Harmony, of Lockport, but did not see him, as I was away from home. After that Mr. M. C. Worts, of Oswego, called. He said he had arrested some men for illegal fishing, about a mile above the Mang farm; that they complained that they should be prosecuted while the Mangs were fishing all the time.

The tenant on my farm tells me the game wardens of Black Rock come down and help the Mangs at seining. There are so many of the Mangs and they are always on the watch, so it is difficult to catch them. I believe the only way in which a permanent stop could be put to their seining would be to employ 2 or 3 private detectives to keep steady watch for a week or 2. Mr. Worts gave me a copy of the game laws. On page 40 I find this: "In the waters of the Niagara river during the months of November, December, January and March it shall be lawful to take all fish excepting black bass and muskalonge with a seine, providing that permission so to do has been first obtained from the Commissioners of Fisheries, Game and Forests, and fish taken contrary to the provisions of this section shall not be knowingly possessed."

So it seems the fishing privileges are to be farmed out by the Commissioners!

Yours truly,

C. F. Witmer.

And so Mang and Perry are still at it, without let or hindrance. Oh, what an easy Pond!—EDITOR.

MR. BLACK DESERTS A GOOD CAUSE.

I have thought the matter over carefully, and have decided not to renew my subscription to RECREATION, at least this year. I suppose you think you are doing a good work, and perhaps you are; but I think a milder way would have effected a great deal more good.

You could have done a great deal for the sportsmen if you had gone at your roasts in a milder way. Perhaps your subscription list is growing as fast as you expect, but it certainly would have grown faster if you had been more conservative.

F. D. Black, Hastings, Mich.

ANSWER.

Where I get one letter complaining of my crusade against the game hogs, I get at least 100 which endorse it in unqualified

terms, and which advise me to keep at it until all these animals are wiped off the face of the earth. As long as I find that my course is approved by 99 out of every 100 men who buy *RECREATION*, then I shall certainly continue on the same lines as I have been working. In fact, as I have frequently said, I should continue my work if it cost me every subscriber I have. As long as I can print 100 copies of *RECREATION* and circulate them, they will be devoted to the cause of saving the game from extermination. I am working for a principle, and shall devote my life to it, and whatever means I have or may be able to get in a legitimate way.

If you will go carefully through your file of *RECREATION* for a year past, you will find that what you term my game hog roasts do not average 2 pages a month. Meantime, I have given you an average of 80 pages a month of valuable reading matter. Are not the other 78 pages a month worth your dollar? If my criticisms on the game butchers do not hit you, why should you object to them?

Inasmuch as there still remain thousands of men whom they do hit, and who deserve everything I say of them, why should you object to my fighting these men? If you are not one of the class I condemn, why not skip what I say about the other men and continue to read the valuable stories, the reports from the game fields and the fishing waters, the discussion of guns, ammunition, photographic materials, and other things that are of great value?

Instead of quitting *RECREATION* now, would it not be much more the part of a genuine sportsman to aid in every way possible to extend its circulation among the men who are destroying the game, and who should be restrained in their career?

I find you are not a member of the League of American Sportsmen. This is another branch of game protective work in which I have invested thousands of dollars, not one dollar of which I expect to get back. Do you not deem it your duty, and that of your friends who are good sportsmen, to not only continue your support of *RECREATION*, but to join this League and aid in its work?

I am not the only man who is devoting days, and nights, and Sundays, and large sums of money to this League work. There are several others. Among them are Ernest Seton Thompson, the artist and naturalist; W. T. Hornaday, Director of the New York Zoological Society; F. S. Hyatt, Vice-President of the National Exchange Bank; Arthur F. Rice, a prominent coal dealer of this city, and Julius H. Seymour, a busy lawyer. We are spending our own time and money to stop the illegal

sale of game in New York City. A great deal of the game that is shipped here, in violation of law, and that heretofore has been sold in close season, comes from your State. Not one of the men I mention has the remotest idea of ever hunting in your state; yet we are devoting our time and our money to saving your game. Now you declare it to be the purpose of you and your friends to abandon us in this work; to refuse to join the League or to read its official organ. Do you consider this the part of a gentleman and a true sportsman?

If you could sit at my desk 3 days and see the reports that come to me from all parts of the Union and of Canada, appealing to us to save the fast disappearing game, and urging me to roast this man, and that man, and the other man, because they are slaughtering game, or because they are buying and shipping it out of the State in violation of law, you would change your mind. Instead of this, you live at home. You, perhaps, still have reasonably good shooting or fishing in your vicinity, and you can go out and enjoy these when you feel like it. Consequently you condemn my course and that of my associates. In denouncing me you denounce them, for I am in the closest possible touch with them all the time, and they approve every line that goes in *RECREATION*.

I have lost 10,000 subscribers within the last 2 years by reason of my war on the game hogs. True, I have gained a great many from among the progressive sportsmen who approve my course, and who would never have read this magazine had they not learned of its noble work. These men assure me I shall get back 90 per cent. of the men who now curse me for roasting them, because they will have reformed in the meantime. I hope this may prove true. My course has been an expensive one to me thus far. If I recoup in time, well and good. If I do not, well and good; but you can bet the last dollar you have in the world that the fight will be to a finish.—EDITOR.

POTHUNTERS IN TROUBLE.

The swell outfit that recently came from New York to invade the game preserves of Pennsylvania, and that was rounded up at Mauch Chunk, got more than they bargained for. A man named McCain was the leader of the party. Prior to their invasion of this State he had sent out special invitations to a number of his friends, all belonging to the wealthy and fashionable set he represented, to join him in a shooting excursion. These invitations were fashioned after the English style, and to read one of them one would suppose that McCain was nothing less than a

duke owning vast estates and wide game preserves. He asked his friends to occupy his "shooting box," and promised them plenty of good sport. These promises were all carried out. The party arrived at the designated place set forth by McCain in his circular, with costly equipments and no less than 21 thoroughly-bred dogs. They had their sport all right, but they never dreamed of the sorry fate that awaited them at Mauch Chunk when they had completed their shooting.

There were vigilant men in Carbon county who were members of the Sportsmen's Club. They had got wind of the predatory raid that had been made by the New York pothunters, and they determined to make an example of them. It will be recalled that the McCain party packed their game in trunks. They knew they were infringing on a law of Pennsylvania which forbids the shipment of any game out of the State which was killed in it. Hence their adoption of a trick to deceive any official who might be on the watch for them. The trunks were brought into requisition as a blind. Mr. McCain and his swell guests were overwhelmed with surprise when all their trunks, those packed with game as well as those filled with equipments, were seized at Mauch Chunk and very properly confiscated. It is said the value of a half dozen fowling pieces that fell into the hands of the law officers was put at \$1,500. The McCain party protested, but to no avail. This whole outfit, together with most of the game they had slaughtered, had passed from their possession forever.

Nor is this the end of it. The Sportsmen's clubs throughout the entire State are united in the determination to bring McCain and some others before the courts of Pennsylvania. Money is being contributed to engage the best lawyers in the Commonwealth to prosecute the pothunters and thus advertise to the world at large that such work must stop.

The sportsmen hereabout say game is plentiful, but would be more so if hunters were compelled to obey the laws. It is certain that Mr. McCain and his friends will be prosecuted to the limit, as they deserve, and will be punished accordingly. This result will have a salutary effect on other offenders and will, in consequence, enhance the value of Pennsylvania's magnificent hunting fields.—Exchange.

In reply to yours of yesterday relative to arrest of parties attempting to carry game out of this State: I not only secured the game mentioned, but the trunks of the entire party, 5 in number, with 5 guns, an extra set of barrels, all their hunting clothes, etc. Yesterday I secured judg-

ment against the party at Mauch Chunk in the amount of \$100 each or \$500 total. Section 6 of the Act of 1897, page 26, is well worth reading and covers the ground thoroughly. The word "whoever" means each individual, and I propose to push Mr. McCain, of Stevensville, for allowing and aiding in this attempt, the men having stopped at his house 2 weeks and the game being packed there. This is the third lot they packed during that time, 2 of which they succeeded in getting out of the State.

Joseph Kalbfus, Secretary,
Board of Game Commissioners.

Harrisburg, Pa.

The parties whose baggage was seized at Mauch Chunk are Thomas Oakley, J. Q. Bourne, F. Herroder, John and William Thurston, all of Mt. Vernon, N. Y. I am just in receipt of a letter from Mt. Vernon to the effect that the Thurstons run a market there, and that this same party make a practice of annually clearing the woods of as many States as possible. One of these men told Mr. James H. Worden, who is one of our Game Commissioners, that they had been in 2 other States before coming into Pennsylvania, and expected to go to Tennessee immediately on their return to New York.

Joseph Kalbfus,
Secy. of Game Commission
Harrisburg, Pa.

AS TO CARIBOU.

Editor RECREATION:

St. John's, N. F.

Your letter at hand, with L. A. S. literature. I have been fighting the battle of game protection nearly alone for a number of years, both in season and out of season, but it has been hard work, as our market hunters are poor men and only live from hand to mouth; but each one has a vote and that makes it hard to get the lawmakers to see game protection in any other light than as the voter sees it. I agree with you that 2 bull caribou is ample for any man, but most of your American sportsmen who visit us think 5 are not enough. Some of them, however, only shoot 2 or 3 and are satisfied. I often have to kill more caribou than I wish, for on some of my prospecting trips, in the uninhabited parts of the Island, I have often had to depend on my gun for food, it being impossible to carry enough in with us.

I have bought a kodak, and shall have many chances of snap shots at live game, as I go this summer to visit our mining claim. Had I taken one last year I could have taken my time and had a fine picture of 48 caribou within 100 yards and inside an angle of 50°.

The only game birds we shoot are the willow grouse and snipe, and now and then a black duck or goose. If you would stop spring shooting you would find all ducks and waders would increase.

I give below a list of good Newfoundland guides:

Robert Porter, South Side, St. Johns.
I. Squires, Telegraph Station, Grand Lake.
Robert Burton, Alexander Bay, Bonorista Bay.
Baxter Stroud, Alexander Bay, Bonorista Bay.
John Stroud, Alexander Bay, Bonorista Bay.
Le Beuf, Billy's Island, P. O.
Richard White, White Bear Bay.
Bernard Davis, Colinette, St. Mary's Bay.
Patrick Cooke, Placentin, Placentin Bay.
Patrick Hicks, Peter's River, St. Mary's Bay.
Thos. Mollot, St. Strotts, St. Mary's Bay.
Edward Lees, River Head, St. Mary's.
Wm. Hollerhan, Trepassey.
Edward Doran, Trepassey.
Denis Benoit, Port au Port.
John McIsaac, Archio, Little River, Codroy, West Coast.
John Stevenson Brigus, Conception Bay.
John Barrington, Fortune Bay.
Stephenson Brothers, Hall's Bay, Green Bays, N. F.

I should advise everyone coming here to bring with him tent and stove with camping kit, and just as little as he can possibly do with in the way of heavy provisions, as they can be had here.

A good, light canoe would add much to the pleasure and comfort of the trip. If money is no object, I advise parties to bring their own setters or pointers. They can then pick their own ground.

The rate of wages is from \$1.50 to \$2 a day. Finding does not cost much, as any sportsman will get venison enough at any time.

W. A. B. Sclater.

ANOTHER BUNCH OF THE ILLINOIS BREED.

I enclose you a clipping from this morning's *Pantagraph*, of Bloomington, Ill., from which it appears that some more game hogs should be placed in the pen.

R. F. Q., Atlanta, Ill.

The clipping reads thus:

J. E. Wood, of Colfax, W. N. Jones, of Anchor, and T. J. Fortier, of Piper City, recently returned from a month's hunting trip in Minnesota and South Dakota. Their record was 2,187 ducks, 39 prairie chickens, 1 brant, 4 jack rabbits, as the result of 3,800 shots. They got about \$240 for the game.

Here is what Mr. Wood says about it:

Your letter received and will say in reply that William Jones, of Anchor, Duff Fortier, of Piper City, and I killed 2,187 ducks in just one month, on Lake Traverse, Minn.

Please send me a copy of your paper and I will send you some business.

James E. Wood, Colfax, Ill.

And here is a grunt from another member of the same herd:

Yours of November 28th received, inquiring if I and 2 friends killed 2,000 ducks in Minnesota and Dakota. What if we did?

What if we did not? What if we killed more? What if we killed less? What disposition do you wish to make of my communication? I have a record of my duck shooting for the last 10 years, and I intend to keep it, unless I know beforehand what object or purpose it is for before I have it published. By answering the above if satisfactory will comply with your request.

W. N. Jones.

Never mind the "business," Wood. It would smell so loudly of decayed pork after passing through your hands that I should not care to handle it. If you and your fellow swine want to subscribe for something to read I would advise you to send for "The Ancient Defender of Game Hogs," published at 346 Broadway, New York. You would like it better than you would RECREATION.

As for you, Jones, don't think of sending me your "record." I know all I want to know of you. So will all readers of RECREATION after scanning the above. Your "record" should be written in the police court of your town.—EDITOR.

ANOTHER HOTEL CALLED DOWN.

Manager, West End Hotel,
125th St. and 7th Ave.,
New York City.

Dear Sir:—I am informed by a member of this League that he dined at your house on January 7th, and that you had on your bill quail and grouse. You are doubtless aware that the legal season for handling such game closed on December 31st, and that it is now unlawful to serve or have in possession any of these birds.

The League of American Sportsmen was organized for the purpose of protecting the game and enforcing the game laws. It is therefore my duty to call your attention to this violation of the law. I do not wish to involve you in troublesome or expensive litigation, and should be glad if you would pledge me, in writing, that hereafter you will observe the game laws strictly. Awaiting your kind reply, I am,

Yours truly,

G. O. Shields,
President.

ANSWER.

New York, Jan. 12th, 1900.

Mr. G. O. Shields, Prest.

Dear Sir:—Your favor of 9th at hand. The game question has been argued for some time by my people, and we have accepted the law as stated in the *World Almanac*, 1898, which gave me time till January 31st.

As you are an authority in this matter, I am very thankful for your kindness in notifying and leniency with me, and will have

this error corrected at once. You may rest assured no more game will be served in my house in close season.

Yours respectfully,

Chas. Faas, Mgr.,
West End Hotel, N. Y.

GAME NOTES.

On December 28th last a party of 3 went hunting on Saluda river. We started at an island near the Custer bridges, and proceeded up the river, going through a forest of stately sycamore, and an immense canebrake. Every now and then a gray squirrel would fall at the report of our guns. Having, after some difficulty, gained the open fields, we tried the quail, bagging 8 before we reached the swamps again. Then going through briar patches, thickly entwined with wild grape and muscadine vines, we reached the foot of Little Saluda mountain. We were on the wrong side of the river and were unable to cross until we found a huge white oak which had fallen across the stream. After a scramble we gained the mountain top, from which, over the stately trees, we could view the plantations strung along the river far below. When we had seen all we began our descent on the East side, and before reaching the lowlands had as many squirrels as we wanted.

W. P. J., Wyse's Ferry, S. C.

Our law makers have decided to allow killing of deer in water. I saw our representative about it and he said the main argument for amending the law was that deer would not take to water unless wounded badly. I should like to know the opinion of RECREATION readers on this point.

Alex. R. McKay, Seckerton, Ont.

What can be expected from law makers who are so grossly ignorant of the habits of game birds and animals as the Legislature referred to above? The Province of Ontario has disgraced herself by repealing the law which prohibited the running of deer with dogs and the killing of deer in the water. The idea of a wounded deer taking to water is the most preposterous I have yet heard. All decent sportsmen will hope that the next body of men sent to Toronto to make laws for the people will have more sense than the last, and that this relic of barbarism may then be wiped off their statute books.—EDITOR.

In September RECREATION W. T. Work, M. D., says he never knew of a gray squirrel's being castrated by a red. I emphatically disagree with Mr. Work's

opinion. Out of every 5 buck gray squirrels I have ever shot at least 3 have been minus the testes, and in every case the scar was plainly visible. I returned recently from a little squirrel hunt, with 5, of which 3 were bucks, 2 of which had evidently been ill treated by red squirrels. I am satisfied this mischief is caused by the reds, as a red will whip a gray every time. I have known a patch of woods to be full of grays and within 2 or 3 years after the reds made a noticeable appearance in the same woods grays could not be found there. Mr. Work should do some shooting in these parts, where there are 10 reds to every gray, and he would soon find his mistake.

F. F. Miller, White Plains, N. Y.

I shall be greatly pleased to aid the League in any manner possible, and will devote my energies to furthering its interests, personally, and through the medium of the World-Herald. The protection and preservation of our birds and our game and fish has long been a hobby of mine, and I have written hundreds of columns within the past 10 years, with the hope of creating a more general local interest in the matter. This has not been without good results, I am proud to say. I will send out the printed matter you have sent me, to prominent sportsmen in this State, known to be interested in the work the L. A. S. has taken in hand. If you have any matter you desire to present to the public do not hesitate to send it to me for use in my columns.

Sandy Griswold, Sporting Editor, The World-Herald, Omaha, Neb.

On the evening of February 7th about 200 members of the Adirondack Guides' Association held their annual meeting at the opera house in the village of Saranac Lake. A number of letters were read from absent members and friends, endorsing the work of the Association and urging the protection of game.

Robert Davidson, Troy, N. Y.

Please correct an error in March RECREATION. You say the open season for hunting foxes, black and gray squirrels, is October 1st to December 31st, both inclusive. The law reads, "Fox, black and gray squirrels"—not foxes. We have no law protecting these at any time.

Wm. E. Shoemaker, Cheboygan, Mich.

There are still some quails and jack rabbits out this way. We also have quite a number of wolves.

Geo. Helfert, Sioux Falls, S. D.

FISH AND FISHING.

ALMANAC FOR SALT WATER FISHERMEN.

The following will be found accurate and valuable for the vicinity of New York City:

Kingfish—Barb, Sea-Mink, Whiting, June to September. Haunts: The surf and deep channels of strong tide streams. Baits: Blood worms, shedder crabs and beach crustaceans. Time and tide: Flood, early morning.

Plaice—Fluke, Turbot, Flounder. May 15th to November 30th. Haunts: The surf, mouths of tidal streams. Baits: Shedder crabs, killi-fish, sand laut. Time and tide: Ebb, daytime exclusively.

Spanish Mackerel. Haunts: The open sea, July to September. Baits: Menhaden, trolling—metal and cedar squids.

Striped Bass—Rock Fish, Green Head, April to November. Haunts: The surf, bays, estuaries and tidal streams. Baits: Blood worms, shedder crabs, calico crabs, small eels, menhaden. Time and tide: Night, half-flood to flood, to half ebb.

The Drums, Red and Black. June to November. Haunts: The surf and mouths of large bays. Bait: Skinner clam. Time and tide: Day, flood.

Blackfish—Tautog, April to November. Haunts: Surf, vicinity of piling and old wrecks in bays. Baits: Sand worm, blood worm, shedder crabs, clams. Time and tide: Daytime, flood.

Lafayette—Spot, Goody, Cape May Goody. August to October. Haunts: Channels of tidal streams. Baits: Shedder crabs, sand worms, clams. Time and tide: Day and night, flood.

Croaker. July to October. Haunts: Deep channels of bays. Baits: Shedder crabs, mussels. Time and tide: Day, flood, flood.

Snapper—Young of Blue Fish. August to November. Haunts: Rivers and all tideways. Baits: Spearing and menhaden; trolling, pearl squid. Time and tide: Day, all tides.

Sheepshead. June to October. Haunts: Surf and bays, vicinity of old wrecks. Baits: Clams, mussels, shedder crabs. Time and tide: Day, flood only.

New England Whiting—Winter Weak-fish, Frost-fish. November to May. Haunts: The surf. Baits: Sand laut, spearing. Time and tide: Night, flood.

Hake—Ling, October to June. Haunts: Open sea surf, large bays. Baits: Clams, mussels, fish. Time and tide: Day and night, flood.

Weak-fish—Squeteague, Squit. June to October. Haunts: Surf, all tideways. Baits: Shedder crabs, surf mullet, men-

haden, ledge mussels, sand laut, shrimp. Time and tide: Day and night, flood preferred.

Blue Fish—Horse Mackerel. June to November 1st. Haunts: Surf, open sea and large bays. Baits: Menhaden, surf mullet and trolling squid. Time and tide: Daytime, not affected by tides.

FISH PARASITES.

What causes grubs in fish? Why are fish grubby in some waters and not in others? Why do grubs affect bass more than they do other fish? Do perch ever get grubby? If perch, pickerel and bass are taken out of the same water, why will grubs be found only in the bass?

J. C. Newbrough, Greenville, Mich.

ANSWER.

The parasites affecting fishes are of various kinds. Some are plants, some are animals, the latter representing several different groups or classes. The parasitic plant found most often on fishes is *Saprolegnia*. This fungus develops on any part of the body, but chiefly on the tail fins or head, or on any abraded portion of the fish. Its usual appearance is that of a tuft of fine white threads which radiate out from the body 1-3 of an inch or less. This fungus first develops beneath the scales. By the time it appears on the surface the fish will be in a bad way, and quite likely to die. It may be saved sometimes by dipping it in brine or salt water. This will often kill the fungus without hurting the fish.

The animal parasites of fishes are numerous, and belong to several different groups. Among the most numerous, although inconspicuous, are the *Myxosporidia*, on which Dr. Gurley has written a big book, which may be had by applying to the U. S. Fish Commission. These usually affect the outer parts of the fish. Most fishes are infested by various kinds of intestinal parasites, the most common being several sorts of tapeworms. Then, again, certain species of insects lay their eggs in the flesh of fishes. These hatch and remain during their grub stage, after which they leave the fish.

Certain species of insects attack certain species of fishes, and other insects attack other fishes. Ordinarily, each species of fish has its own peculiar species of parasite. These different parasites attack different kinds of fishes for exactly the same reason that certain diseases affect man, others affect horses, others chickens, and yet others each other kind of animal. Cer-

tain insects lay their eggs in certain fishes for exactly the same reason that the house-fly lays its eggs in barnyard refuse—simply because that place has proved advantageous.

Fish are grubby in some waters and not in others—for the same reason that people in some places have yellow fever and those in other places do not. Some waters may be entirely free of any parasites that would attack the fish.

Parasites do not affect bass more than any other fish. Some species will affect bass, while other species will affect other kinds of fishes. Perch probably get grubby where the water is impure and food scarce.

Probably perch, pickerel and bass taken out of the same water will all be grubby; but if not it is because the grubs which attack perch and pickerel have no foothold in that particular water. It is for the same reason that one can find cows, horses and chickens all in the same barnyard, but find only the chickens affected with the gapes. The particular grub which has a start in that water probably does not thrive on the perch or pickerel.

B. W. Evermann.

MY CATCH WITH A SPLIT BAMBOO.

G. A. C.

In November RECREATION I note an article praising the steel rod and condemning all others. Without intending to start an argument with Mr. Miner I am going to tell what a greenhorn accomplished with a bamboo rod.

In September, '98, I was the guest of a member of the Orleans Fishing Club, which leases the Jeanotte river at Lake Edward, Canada. My friend Jake stood beside me on the bank, near the clubhouse, while the gentleman whose guests we were was casting on the other side. Suddenly Jake cried, "Did you see that?" pointing at the same time to a series of rings about 35 feet from shore. "Cast just below that rock and you'll get a dandy," he said.

My arm was lame from casting, and it took me some time to reach the spot. In fact, I kept Jake and one of the guides busy releasing my hooks from the trees behind me. Finally the fly dropped like a snow flake or a brick—I did not have time to note which—for I felt such a tug as I never felt before.

"Look out! look out!"

"Don't give him any slack; reel him in! Give him the butt! Don't let him get down into that swift water!"

"You'll lose him!" and more expressions of the same sort came to me in a solid chunk all the time. Oh, if they would only shut up and let me alone!

Such a swishing, first up, then down. Finally my fish got into that swift water. It took me fully 15 minutes to get him out of it again, and 20 more to bring him to shore, where old man Trombly stood ready with the landing net.

I fished no more that day, but when the others were not in sight I would sneak down to the water's edge and sit for minutes gazing at my prize swimming around in the live box. That was on Friday about 4.30. We kept him in the box until Sunday noon, when St. Laurent, the guardian, took him home, as we had enough smaller ones for ourselves. The big fellow weighed $4\frac{3}{4}$ pounds, and the guide said he had lost fully $\frac{3}{4}$ of a pound during captivity. He was caught with a split bamboo, and a light one at that.

The following day St. Laurent and I went down below the club house, where the river makes a curve and forms quite a large pool. I was not able to get a rise until the guide pointed out a spot to cast at. Another jerk; and the guide cautiously paddled the canoe away from the spot. In a minute he said,

"You have 2, a trout and an ouananiche."

I must confess I did not know it. "Are they big?" I asked.

"Oh, yes; trout he hab the Jock-o-scot fly; he big, $2\frac{1}{2}$ pound; ouananiche he hab black fly; he 'bout 3 pound," answered Achille.

And to my surprise when he skillfully netted both they weighed within $\frac{1}{4}$ pound of what he had said they would weigh. So much for the other rods with their grooved cordwood. I cheerfully admit that I broke several tips going through the portages, but not one on a fish, though I caught some big ones, and am a greenhorn at that.

BROOK TROUT.

S. E. STANTON.

As the lawful season for taking these most beautiful of all fish is now open, and the subject is being entertained by many persons, it seems opportune to pay homage to the trout; also to consider them with other ideas than those of taking them.

The use of colors to trout is not fully comprehended by all persons, because of lack of thought and study. Trout caught in shallow and clear streams have lighter shades than those taken from darker waters, shaded pools and spring holes. The reason for this difference is that the trout, like the chameleon, is capable of changing its colors to fit its surroundings, and this gift of nature is in a large part its protection. Being dark on its back protects it from being seen from above, while

its white underside, seen from below, blends with the rays of light from above and equally, protects it from being seen from beneath, thus hiding it in a measure from enemies both above and below. Its most wonderful ability to change its colors is in the spawning season. Then the female shades from copper to pink, while the male is gaudy with scarlet sides, rolling and turning himself on dress parade before his mate, which is always of his species, although other varieties of trout may inhabit the same waters.

Trout are extremely sensitive. In the water they can quickly detect change of wind, shock from explosion or thunder, etc. Possibly the change of trout with each season from hibernating in winter to full agility in summer is because they are governed and affected through their sensitive nature by the electric currents which impart life to man and come to him in his element of air, but no less to the trout in its element of water. Man's agility does not compare favorably with that of the trout, and very likely the trout is even the most susceptible.

Let us all at this season honor these creatures. Let those who seek them with rod and creel employ none but lawful methods, having in mind a just feeling for the other fellow who may come later. Above all, let none of us act the part of the game or fish hog, but do everything in our power for the continuance of the trout, and not deplete the waters they inhabit to their total extinction.

A DAY AT QUIMBY POND.

It was a bleak, cloudy day when Clyde and I took the steamer on Rangeley lake for Hunter's cove. Thence we walked to Quimby pond, famous for gamy trout. The pond is shallow, nearly round, and the greater part of its shore is densely wooded. We stopped at Dick Quimby's house long enough to engage a boat, and then hurried to the pond. Every now and then a trout would break water, leaving a little ring of ripples. They were evidently feeding, and I put my tackle together as quickly as my benumbed fingers would allow.

My fly rod was 9 feet long and weighed about $4\frac{1}{2}$ ounces. To my line I attached a 6-foot leader, and on that looped a brown hackle, with a cardinal for dropper.

Having chosen our boat, we stepped aboard and pushed out into the pond. I began at once to get out my line, and was using about 35 feet of it when a half-pound trout swirled at the dropper, but I, being too much excited, missed him. Clyde rowed half a mile or so along the shore, keeping about 200 feet from the bank, and

then back to the landing, thus covering the best fishing ground in the pond.

Not far from where I got the first rise 2 trout leaped suddenly clear of the water for my flies. That time I struck and hooked them both. For the next hour Clyde rowed me back and forth, and I picked up a trout now and then. All that while the wind had been rising and by noon was blowing hard. So cold was it that my hands were numb, and when a trout rose to my fly I generally missed him.

We went ashore and ate lunch in the woods, and a mighty cold meal it was. I fished a while after lunch and caught 3 more; then, as the wind increased, we decided to stop. Our catch amounted to 15 fish, averaging one pound each.

F. S. Dickson, Phila., Pa.

KEEP AN AQUARIUM.

I have for some time been a devoted reader of *RECREATION*, and I suggest that you interest your readers in keeping fish in an aquarium at home. By this I do not, however, mean 2 or 3 so-called "gold fish" in a bowl, but a variety of small game fish in a tank 12x14x20 or thereabout. I have done this for some years past and find it a most interesting thing. If these fish are taken when very young they will thrive in confinement in such a space, providing sand, stones, weeds, etc., are placed with them, in order to give them such haunts as they dearly love in brooks and streams. I should like to hear from others who have done this. One might think it impossible to have a variety of these little chaps in the same space, but I find no trouble. I have not, however, had any black bass, having never been able to secure any small enough. I have had rock trout, rock bass, elvers (young eels), and several varieties of which I did not know the names. I have also had a few small sunfish, catfish and a tadpole or newt in with them to make things more interesting. All of these have done well and I have spent many pleasant winter hours watching these little fellows enjoy life.

John N. Ore, Chicago.

"Shouldn't wonder," said the proud father, as his wife came in with another load of stove wood, "if our Ike wuzn't President some day. Most of 'em has been sons of poor folks, you know."

"He'd have a heap better chance if he was a son of a pore widow," remarked the lady with some asperity, and the lord of the mansion changed the subject.—Indianapolis Press.

GUNS AND AMMUNITION.

THE .30-40 WINCHESTER AND THE SAVAGE .303 COMPARED.

DR. G. T. SMITH.

I consider these 2 rifles as representing the highest types of American modern arms. Each is possessor of individual advantages and characteristics. Both are powerful, accurate, have flat trajectories, great penetration and wonderful killing power with slight recoil. The sooner sportsmen realize this important fact and discard their archaic black powder and big bore weapons the better it will be for both man and game.

The .30-40 is considered by authorities $\frac{1}{3}$ more powerful than the Savage. The .30-40 cartridge contains 36 grains of powder with a 220-grain bullet, either steel jacketed or soft nosed. It has an initial velocity of 2,066 feet a second. The length of barrel is 28 inches, the twist one turn in 10 inches. The magazine is of the box type, with its weight well balanced at the breech. The action is smooth and quick; but in my opinion not quite so rapid as that of the Savage which I can work with greater ease. The finger-lever of the Savage does not extend so far down when extracting a shell as does that of the .30-40.

In this regard I prefer the Savage. Again, the Savage externally shows no presence of any magazine, except the small indicator on the left side of the receiver, for registering the number of cartridges in the magazine, this being an excellent feature of the arm.

The Savage sporting rifle has a barrel of 26 inches; the twist is one turn in 10 inches. The shell contains but 27 grains of smokeless powder, with a 190-grain bullet, thus making a cheaper cartridge for general use. Taking everything into consideration, this is the best rifle for all-around work. The manufacturers have put 6 different cartridges on the market available for all sorts of game. It is further claimed that it will shoot as well at close as at long range.

The Savage steel jacketed bullet has a penetration of 33 $\frac{7}{8}$ -inch pine boards, at 15 feet from the muzzle, with a range of 2,000 yards, and a point blank range at 200 yards. With these high velocity arms the soft nose bullet is the only one for big game.

It will expand on impact with flesh, and this expansion becomes greater should it meet with more resistance in its course. In the Savage, again, there is the advan-

tage for those who desire it of having a hammerless arm. This new departure is so well arranged that when the hammer is cocked it can readily be felt when light is obscure, by the projection of the indicator above the top of the breech bolt, and when light serves it is readily seen. The arm is exceptionally well balanced. I never had one come to my shoulder better. Both of my rifles are fitted with Lyman rear and ivory bead front sights, which add greatly to the value of these rifles as well as to the convenience of the shooter. On my .30-40 Winchester I have the special Lyman receiver, and on the Savage the Lyman combination rear, a miniature sight adopted for that arm. We all owe Mr. Lyman gratitude for his contribution to the modern rifle, through his invention of the famous sights which deserve such high praise.

I can not urge too strongly the benefit to be derived from the use of the Lyman sights. They constitute one of the essential factors pertaining to successful shooting. The best front sight on a sporting rifle is the ivory bead. I prefer the jack bead to the small ivory one, because, as it often happens, the hunter secures his best shot either early in the morning or at dusk, and unquestionably this sight would be the best at such times. I find it not a bit too large, so recommend its use on all sporting arms.

So convinced am I of the marvelous power of these guns that with one I would have no hesitancy in facing a grizzly in his fiercest mood. So armed, any one may confidently expect successful results, provided he displays the requisite coolness and courage.

Although the power of the .30-40 Winchester is greater than that of the Savage, I doubt if its immediate effect on game surpasses that of the latter. I think the killing effect of the 2 arms differs but little.

They are both magnificent specimens of the rifle maker's art, and no one could go amiss in selecting either. The weight of the Savage is 7 pounds, 5 ounces; of the Winchester, 8 $\frac{1}{4}$ pounds. Both are 6 shot, 5 in the magazine and one in the barrel. The penetration of the .30-40 steel jacketed bullet is 58 $\frac{7}{8}$ -inch pine boards at 15 feet from the muzzle.

The accompanying drawing demonstrates well the power of this rifle. These shots were fired at distance of 200 feet.

The piece of steel was $\frac{3}{8}$ inch thick, and the ball pierced it as if it had been cardboard. The diameter of the entrance

of the bullet hole is 8/16 inch; the exit being 9/16, showing a spread of 1/16 of an inch during its course through the 3/8-inch steel.

There were 2 shots made on the edge of the steel which simply punched the edges out clean cut, with not the slightest deflection of the bullet from its course. This latter piece of work impresses me, more than any other test, with the marvelous power of this arm.

Another feature of these arms is the non-fouling of the barrel, even after many shots have been fired. High velocity, the result of smokeless powder, is at present only possible with small calibers in hunting rifles; in the future large caliber and high velocity may be associated.

The secret of the enormous smashing power of the small caliber is the immensely increased velocity imparted to the bullet. It strikes the game with such force that the adjacent tissues, whether bone or flesh, are sent flying in all directions with such power as to act themselves as missiles. This fact assumes greater importance when the initial velocity of the arms is carefully considered. The tra-

jectory of the .30-40 at 100 yards is 1.46 inches; at 200 yards, 5.10 inches; and at 300 yards, 14.14 inches. The Savage trajectory at 100 yards is 1.23 inches; at 200 yards, 6.25 inches; and at 300 yards, 16.41 inches. Thus the .30-40 has a flatter trajectory at 200 and 300 yards; the Savage, at 100 yards.

I recently tested the .30-40 on a beef. The 220-grain soft nose bullet was used at a distance of 15 feet, the entrance of wound in forehead being as large as that produced by a 50 caliber. After dissecting away the skin a stellate fracture was observed, with marked comminution, accompanied by a true disarticulation of the top of the skull. The brain that was left was of mush-like consistency, and everywhere throughout its substance were fine particles of crushed bone. At the base of the skull

it shattered the large condyles, proceeding down the cervical vertebræ to the 5th, where it was deflected to the left. During

its course down the vertebral column small bits of lead — strippings from the bullet — were observed, and at its termination the half jacketed cover had parted from the rest of the bullet and was found 3 inches to the right. The death of this animal was instantaneous.

The high velocity, smokeless powder, flat trajectory, small caliber arm is especially adapted to antelope shooting on the prairies, and for goat and sheep in the Rockies, where long range is required.

At 600 yards sheep, goats and antelope may be killed with ease.

It is reported that the Royal Bengal tiger of India, the elephant and rhinoceros of Central Africa, are being successfully hunt-

ed with the .303 Savage.

A RELIABLE TELESCOPE SIGHT.

In answer to Mr. Otis Hoagland, of Echoburg, Ill.: I have used one of Cummins' telescope rifle sights 6 years, and during that time have had it on 6 different rifles. It has been used under all possible conditions that obtain in this part of the country. It is of about 10 power with both wind gauge and elevation movements.

I have, with only one trial, put 9 out of 13 bullets on to 12 inches square, at 550 yards, with Remington-Hepburn rifle, .38-55, 265-grain Zettler bullet, temper 1 to 35, seated in barrel; shell, full fg. powder. I could put on to a 7/8 poster at 100 feet any number of the same bullets used in the same way, with the exception of the powder charge, which was a .32 long shell full of Troisdorf shot gun powder loose, with-



out wad, and with nitro primer. Whoever uses Troisdor powder in a shot gun will make no mistake. These 2 results I obtained without changing focus of glass, which was focussed to give best vision at 200 yards. The short range work can be done by lamplight or twilight as well as by sunlight. I have shot less than 10 scores at 200 yards to count on the standard American target, strictly O. H. All told they average above 80. The first was 87. Once I got 91, and once 83 in 9 shots; so you see they are good for something in O. H. shooting. After becoming used to a telescope one can tell within an inch of where his bullet strikes a woodchuck anywhere up to 65 or 70 yards.

Mr. Hoagland asks especially whether telescopes are of use on cloudy or dark days. To illustrate, I will tell of one incident: I was in dark, heavy timber, about sundown, facing the West. I caught a glimpse, against the sky, of a squirrel running up the side of a hemlock tree about 8 rods off. I looked several minutes for him with the naked eye and from some movements he made I finally located him curled up on a knot, facing me. I could barely make out that he was there. No man could have seen him by looking through or over any steel sights that were ever made. With the 'scope I could make out that it was a red. I could see the white spot on his breast, his eyes and his general outline. As I always make it a point to shoot the little pests I tried the virtue of a telescope in the dark. The bullet struck the white spot fair, at O. H., too. That was the regular target model 'scope. For such work the hunting model of 3 to 5 power would be much better.

W. E. Stoddard, Montpelier, Vt.

THE SAVAGE IS ALL RIGHT.

I am a new subscriber, and I have found in RECREATION what I have long looked for. I have already learned several useful items regarding rifles and photography in the 2 copies of the magazine I have seen. I have been trying to determine the best high velocity smokeless gun to buy, and had almost decided on a Savage, but at the last moment a friend told me they were not to be relied on, as the coil hammer spring gets weak and causes misfires. Would you recommend a '95 model box magazine Winchester, using the .303 British shell? I have a fine old reliable .40-82, '86 model, W. C. F., which is a capital gun for ranges up to 150 yards for moose or elk, but in hunting black tails and jumpers and white-tail deer I wound and lose too many to suit me at ranges over that distance. I find the split bullet, as mentioned in the Ideal Hand Book, cast with paper across

point of mould, much more effective than a hollow point ball in my gun. The bullet properly cast mushrooms to the base.

I generally spend the winter back in the mountains North of here, trapping and hunting. Moose, elk and deer are plentiful. I saw about 30 mule deer in a 10 days' hunt and got capital sport, but one wants a long range rifle, as the deer are hard to stop at ranges over 150 yards with an old black powder gun.

T. Bickford, Binscarter, Manitoba.

ANSWER.

Your friend who told you the Savage rifle is not reliable is away off the trail. I have had hundreds of letters from men who have used and misused these rifles; who have submitted them to severe tests in the mountains and woods in all kinds of weather, and have never before heard of one failing to work to the entire satisfaction of its owner. I have published several of these letters and have several others in hand for future publication.—EDITOR.

FOLLOW DIRECTIONS IN USING SMOKELESS.

1. Does a rifle have to be specially made to use smokeless or semi-smokeless powder?

2. Does vinegar harm a rifle? It cleans excellently.

3. What kind, if any, game is found around Holyoke, Mass., and when can it be shot.

L. R., Brooklyn, N. Y.

ANSWER.

1. A smokeless powder which is made for black powder rifles does not require that the rifle shall be made specially for it, but in all cases the directions for loading the smokeless powder, as laid down by the manufacturers, should be carefully followed. Where it is desired to use a smokeless powder designed to give a muzzle velocity of 1,900 to 2,000 feet a second, a rifle made specially for this class of powder is required; and such rifles will not do good work with black powder.

The high velocity which is attained by the use of a high power .30 caliber or similar rifle cannot be attained in any rifle built for black powder.

2. Acids should never be used in cleaning a rifle. If necessary use a brass wire scratch brush made for the purpose. It will not injure the rifling.

3. There are a few quails, squirrels and ruffed grouse about Holyoke, Mass., but only a very few. Write the U. M. C. Co., 315 Broadway, N. Y., for its book of game laws. It gives the laws of all States and costs nothing.—EDITOR.

REPEATER LESS EXPENSIVE.

G. R. Rucker asks what advantage the repeating shot gun has over double guns.

The chief advantage, I think, is in price. One can buy for \$18 a Winchester repeater that will outshoot any other gun made at that price. Are they safe? The lever action gun is. I would not use a sliding forearm action. I consider them dangerous. I think a Winchester repeater will wear as well as any other gun. I have seen these guns which had been used a number of years and were in good shape. Is there much likelihood of jamming? Not unless you try to use reloaded shells that have been bulged, or unless you get in too much of a hurry. I have never known one to burst.

If one can afford a good double gun, then he would better buy it. For general use I prefer this form, as it is nicer to handle. It gives the shooter 2 accurate shots in much less time than the repeating gun can, and 2 shots at one time ought to be enough for any reasonable man. Still, the man who wants a cheap and reliable gun of great killing power can not do better than to buy a Winchester lever action repeater.

F. W. Bicknell, Des Moines, Ia.

DRAW YOUR OWN CONCLUSIONS.

I will tell J. H. Isbester my experience with a .30-40, '95 model, Winchester. While hunting in Montana last fall I jumped a white tail doe from a thicket on the edge of a draw, about 75 yards from me. Just before she went out of sight I fired. Following, I found her dead, about 50 yards from the edge of the draw. The bullet entered the middle of the body, just in front of the right hip, ranging a little forward. It came out on the opposite side at about the same level, and back of the ribs. The bullet hole at point of exit was an inch in diameter. Later in the day my companion, Dr. Squires, shot a doe, the bullet passing through the right hip, the bowels, liver and right lung. She ran 100 yards and lay down. The doctor followed and fired again, breaking her left hind leg. She ran 75 yards farther and again lay down. She attempted another run as we came up, but we caught her and finished the work with a knife. Dr. Squires used a .45-90, '86 model, Winchester. Mr. Isbester may draw his own conclusion as to the comparative power of the 2 guns.

Dr. F. D. Fanning, Butler, Ind.

ANCIENT MODELS.

Under the heading of "An Old Timer," C. A. Bennett tells of a 7-foot gun in his possession. That gun, I suppose, is a smooth bore flintlock, woodwork extending to muzzle, and with brass trimmings. I think 7 feet the maximum length of those guns. They were apparently popular on Long Island at one period; but so

many were cut down and fitted with percussion hammers that but few remain in their original state. Those can be found only in the ancient farm houses on the island. I have one 6 feet long, and have seen one that measured 7 feet in the possession of the Kowwenhoven family. The late John Halleran, famous as a collector of Long Island antiquities, had a most interesting collection of old smooth bore flintlocks, but the one I have is longer than any of his. "Robinson Crusoe's" (Alexander Selkirk) gun was of the same pattern, although it was apparently not over 6 feet long. I judge from a photograph of it, a reproduction of which I have.

Dan Beard, Flushing, L. I.

DOES CRIPPLED AT LONG RANGE.

The small bore is now strictly in fashion, but is it just the thing for a hunting arm? Those who have not had much experience will buy the gun most in fashion and think it just right. For the purpose for which it was designed, war, it is the only arm, but it needs good eyes to go with it. I appreciate the value of smokeless powder and a flat trajectory, but extreme range is no advantage in hunting. This State forbids the killing of does; yet I have seen men blaze away at deer so far off one could not tell whether they were bucks or not. Does were crippled and killed by long range guns and the hunters didn't dare bring out the meat. Tenderfeet? Well, yes; but you can see plenty of men start out with 100 cartridges to kill 2 deer. It would be a good thing if everybody had to use a single shot rifle. But in that case some cartridge factories would have to shut down.

W. H., Goldfield, Colo.

SMALL SHOT.

In August RECREATION I notice A. E. Midgley's answer to J. W. Brown, how to make a full choke gun shoot an open pattern. I have used the shot spreaders sold on the market. Also the divided charge of shot with thin wads. I shoot a full choke gun, and always use a scatter charge in right barrel. I take a good quality of note paper, roll it 5 or 6 times around a lead pencil, securing the edge with mucilage, and let it dry. To load your shell, put in powder, wadding and shot as usual. Then take your paper roll, press it down in center of shot, cut it off even with roof of your shot charge. This gives you the length of your shot spreader for the amount of shot used in the load. Put on top shot wad and give a good crimp. I find this load for a scatter charge superior to anything else I have used.

B. A. Fay, Springfield, Mo.

I use a .45-70 Winchester, extra light 22-inch barrel, take down, which I think as fine appearing and handy a rifle as I ever saw. I have used the soft tipped bullet "Boone" speaks of, and find it effective on large game. On striking a bone, 9 times out of 10 it will expand to nearly 3 times its natural size. The composition I use is one part tin to 16 of lead for the base, and pure lead for the tip. Have never tried the tip for penetration, but think it would prove satisfactory if made considerably harder than the base of bullet. For small game I use 6 grains ffig powder with a round ball, made of one part tin to 16 of lead. Seat a little below the head of shell with an Ideal No. 5 tool, and always resize the muzzle of shell before loading. Drop one or 2 drops of melted beef tallow on top of ball.

A. W. Hildebrand, Preston, Conn.

In September RECREATION "Ramrod" asks how to load .30-30 shells cheaply. No. 1 and No. 2 Dupont powders are especially adapted to .30 caliber rifles. Use 10 to 15 grains for ordinary shooting at distances from 50 to 150 yards. For long range, up to 30 grains of U. S. smokeless may be used. The powders mentioned are the cleanest known, and unequalled in strength and accuracy. The gases given off in combustion are alkaline; and the slight residue is nearly pure carbon and will not accumulate in the barrel, even after a great number of shots. A single greased swab is sufficient for all necessary cleaning. Best results are obtained by using a nitro primer. Pay attention to the proper seating of the ball on the powder without too much compression. The choice of loading tools is a matter of individual preference. Old Sport, Woyan, P. Q., Can.

I have a 12 gauge Remington single barrel semi-hammerless choke bore. For squirrels and rabbits it cannot be beaten. I have also a '92 model, .32-20 Winchester, which, with 20 grains of black powder, will send a lead bullet through 2¼ inches of seasoned oak. At what distance, with a metal patched, soft nosed bullet and 9 grains of smokeless powder should it kill a deer?

F. V. R., Monongahela, W. Va.

ANSWER.

The rifle would kill a deer at 200 yards if you could put the bullet in his brain, spine or heart. It might kill if the bullet were placed elsewhere in the body, but not so surely as a more powerful weapon.—EDITOR.

W. S. Blinn asked in September RECREATION for information regarding small

gauge shot guns. I have a 4½-pound, 20 gauge, single gun that shoots well. It has a 30-inch full choked barrel, sliding breech-lock action and rebounding hammer. I like the action, and with it can fire 2 shots almost as quickly as with my double gun. For squirrels, quails and woodcock I use 2½ drams powder and ¾ ounce No. 8 shot. For rabbits and grouse, 2½ drams powder and ⅞ ounce No. 5 or 6 shot. With these loads I seldom fail to bring down my game. I have also an expensive 12-gauge Parker that I use for marsh shooting. For other work I generally fall back on my 20 gauge.

Namaquit, East Boston, Mass.

Am on my way to the coast selling Ithaca guns, and do not find our ad. in February RECREATION. What is the matter? If the Ithaca Co. stop advertising in RECREATION I shall feel like throwing up my job. There must be a mistake somewhere, because they know RECREATION sells as many guns for them as all the other papers put together.

Louis P. Smith, Minneapolis, Minn.

The Ithaca people increased their space from a half page to a full page and so Mr. Smith had failed to recognize it. The Ithaca Co. has never missed an issue of RECREATION since it started.—EDITOR.

Why do nearly all repeating shot guns use forearm action and nearly all sporting rifles use the lever action?

A. R., Butte, Mont.

ANSWER.

Apparently the forearm action is preferred by most people, though some still use the lever action guns. The latter are not so good looking as the others, being deeper in the frame. Perhaps that has something to do with it. Possibly, also, the forearm action is easier to the ordinary man than the other is.—EDITOR.

In answer to E. I. Oliver, I would say I have owned a B grade Baker hammerless over 2 years. I believe the firing pin safety is all the manufacturers claim. The hammer cannot possibly strike the firing pin unless the trigger is pulled, which, of course, moves the safety block out of the way. My Baker has 28-inch barrels, weighs a little over 7 pounds, and is a hard shooting gun. When held right it pulverizes clay birds.

Leather Stocking, Pepperell, Mass.

I read in RECREATION a few months ago articles praising Peters' .22 short and long rifle cartridges. I had a chance to try them against U. M. C. .22s. Peters' .22 shorts are not so powerful as U. M. C.'s

and have a much higher trajectory. The trajectory of Peters' .22 long rifle and that of the U. M. C. .22 short is about the same. I have taken nearly all sportsmen's magazines and would not give RECREATION for all of them.

Omer F. Waer, Shandon, O.

I shoot a .32-40 with black powder loads, and think I can kill as much game as any man who shoots a .30-30. I have seen lions killed instantly with a shot from a .25-25. Mr. Wadsworth, of Lander, Wyo., is mistaken in regard to large bores. I would rather stand in front of a grizzly with a .45 than with a dozen .30-30s. The .32-40 is more accurate than the .30, and if held right is just as good or better.

Winchester, East Helena, Mont.

I have shot a revolver and a pistol for over 4 years and find the latter the most accurate. I now have a Stevens 10-inch barrel, which I have had but 3 days. I measured off 25 yards and placed a 3½-inch paper circle on a board. Resting, I put 30 consecutive shots in the paper. I then placed 12 consecutive shots in a 5-inch circle, off hand, at same distance. I used the .22 short cartridge.

G. H. N., Steubenville, O.

I wish to say to T. M., Southboro, Mass., that the .32-40 Winchester, '94 model, does not stand second to any rifle in existence, for any purpose whatever. I have one of that model and find it will do anything a gun can do. Get one and try it, and if you do not like it you may have my hat for a hen's nest.

R. W. Stout, Poolesville, Md.

Dr. Cabell asks, in September RECREATION, if metal jacketed bullets injure a rifle barrel. I have a .25-35, which I have used constantly 3½ years, always using metal jacketed bullets. It is as accurate to-day as when bought. Moreover, I have never wiped it out since I had it. It is nonsense to be cleaning a gun all the time.

M. P. Dunham, Ovando, Mont.

Those who cannot get their share of game with double barreled shot guns or single rifles should practice shooting until they can. The men who are so pleased with repeaters would be still more delighted with a machine which would spray a continuous stream of shot over an acre of ground at once.

T. B. Nelson, Pulaski, N. Y.

In reply to E. I. Oliver's question in January RECREATION in regard to the firing pin safety device in Baker hammerless guns: The device is just what the manu-

facturers claim it to be. I have used a Baker hammerless 2 years, and would not have a hammerless gun without a firing pin safety device.

P. Steffes, Winona, Minn.

In reply to R. J. H.: I have used a Remington semi-hammerless single gun for years. It is a hard shooter and strong enough for nitro-powder. It shoots as well as higher grade guns of the same make. It lacks an automatic ejector, an appliance which makes a single gun nearly as efficient as a double barrel.

A. B. C., Grass Valley, Cal.

Have tried the Laflin & Rand powder you sent me and am well pleased with the result. It is the cleanest powder I ever used, and gives excellent penetration and pattern. I have a Winchester repeater, which I have shot more than a year and against a number of different guns, but have yet to find one that would outshoot it.

S. F., Dundee, N. Y.

It is purposed to organize in Chicago an American rifle and revolver club, which will maintain a range on some accessible part of the North Shore.

RECREATION readers who take an interest in the matter are requested to address

G. L. Lehle,

39 Buena Terrace, Chicago.

Is it advisable or even necessary to use a metal patched bullet in large caliber, .45-70 rifles, when the shells are loaded with smokeless powder? If not, what proportion of lead and tin will be correct in order that the bullet may not lead the barrel?

E. V. Ross, M. D., Rochester, N. Y.

I consider the .30-30, '94 model, Winchester the best all around rifle made. I have also a '97 model Winchester repeating shot gun. As far as shooting qualities are concerned it is the equal of any double gun I ever saw.

W. C. Balch, Bronson, Kan.

I agree with F. W. Hambleton's opinion of the .30-30. It may be good enough for deer, but when one goes after bear he wants a .45-70 or .45-90. I use a .45-90 Winchester and I don't think it can be beaten by any rifle on the market.

J. M. Lionnet, New Orleans, La.

Somewhere in RECREATION I have seen mention of rear sights for shot guns. Please ask advertiser to send me a catalogue.

W. G. Wilderman, 4959 Page ave., St. Louis, Mo.

NATURAL HISTORY.

ANTS AND THEIR PARASITES.

C. C. HASKINS.

M. Charles Janet, a naturalist of the Lubbock school, has studied ants in a rather original way, paying special attention to the parasites which infest their domiciles and their bodies.

Of course to cut into one of these inhabited caverns with its myriads of occupants would create confusion so dire as to prevent all chance of gaining the knowledge sought. It was necessary for M. Janet to find means by which, without disturbing the industrious community, he could take out samples, so to speak, of the inhabitants,

their eggs, larvæ and young, and their parasites.

To accomplish this he procured a stake having a number of holes bored into it laterally. Upon these he nailed a strip, with an aperture over each hole or cell sufficiently large to admit an ant. This stake he made attractive to the ants by smearing it with a little honey, and drove it downward through the hill.

Once the disturbance created by its intrusion subsided the little people examined it, decided that the apartments provided were habitable, and proceeded to occupy them for the various purposes incident to



STEALING A DINNER.

ant housekeeping. In a few weeks the naturalist withdrew his stake, and found imprisoned in the little chambers all the desired material for his investigations.

Janet says that one of the most common parasites is a mite known as *Antennophorus*, which moves but little about the nest. It manages, however, to fasten itself on the body of the ant, where the latter is unable to dislodge it. There are 3 such unreachable points: under the head and on either side of the abdomen.

One of these mites when detached will show much excitement on the approach of an ant, extending its fore feet while standing on its hinder ones. Its fore feet exude a sticky substance which, touching the ant, serves to hold the mite. The ant thus attacked becomes frenzied notwithstanding he may already be carrying one or more of the pests. He threatens with his mandibles, strikes with his feet, doubles himself in a vain attempt to reach his unwelcome guest and throws out poison at him. When the mite has reached a position of safety its victim surrenders to the inevitable. These mites have been seen to change from one ant to another, when 2 of the latter were near enough to allow of this movement.

Each ant has a magazine of food supply, not unlike a crop, and it is from this storehouse the mites draw their rations. But they can only obtain them when a transfer of food is made from one ant to another. The mites know how to demand and to obtain this food, either from the mouth of the insect upon whom they are billeted, or from another. Though the mites are not well received by the ant at first, yet when once they are settled the pest-ridden insect submits with good grace. Janet often saw ants licking each other, after the manner of cattle. If during one of these toilet scenes a mite arrives it receives the same fond attention, and in addition a drop of disgorged food.

Another form of mite, named the *Discopoma*, is also abundant in these subterranean homes. It, too, wanders slowly about, or sits on its hind legs reaching forward its sticky arms. If it can but reach a passing ant it fastens on him. This form of mite is properly a parasite. It lives on the internal juices of its victim. Fortunately for the ants, their various tormentors are not life takers.

If, after the naturalist had abundantly fed his ants, he returned them to their artificial nest, they at once divided their garnered store with their less fortunate companions. The provider placed himself a little in front of the receiver. Opening his mouth he extended his tongue, and ejected small drops of food which the beneficiary immediately absorbed. No sooner does the

commissary arrive than the *Lepismima*, a third form of mite, scents the honey. He proceeds to hold up both the giver and receiver by placing himself between them, and intercepting the sweet morsels as they pass. The 2 ants, raised against each other, can only threaten the thief, without being able to dispose of him.

PROTECT SEA BIRDS.

Senator Hoar sends me the following letter, which he received from Mr. Abbott H. Thayer:

Scarboro, N. Y.

My dear Sir:—

In case of the failure of your bill, which aims to prohibit the wearing and selling of birds, would it not be worth while to propose protection for sea birds and others at breeding time? The most prosaic Congressman should be able to see that the feather dealers are not wise in claiming as a dignified industry the swift destruction of the goose that lays their golden egg. What plea can they make, as business men, for an occupation which by the law of its operation can only last a year or 2?

A United States law which recognized the plume industry, but restricted it to game season rules, on the ground that so only would the plume business be business like, might pass; and it would be better than nothing. Such is the Massachusetts law on gulls. Of course, the feather men can give the distressing answer that as fast as one species has grown too rare to pay the seeking, they can turn to our song birds. Yet it does seem as though the coarsest man in Congress would join to demand that the milliners furnish only what they can get without attacking as it were the principal. They should be content with the interest on bird life.

This gross onslaught has in Maine brought the breeding sea birds down probably 75 per cent. in the one summer of 1899, so shockingly great was the killing for the New York market. Surely these are not long-headed business principles, and the birds they are sweeping away are the main scavengers of the ports. Refuse which by floating escapes many of the fishes, and which would sooner or later be a stench to summer visitors along a hundred miles of adjacent beach, is removed by these birds, and, essentially, only by them. This fact will be felt by all these feather dealers and their supporters in a few years.

Mr. Manly Hardy, of Brewer, Me., writes that no keepers can do any good there on account of the shooters' custom of decoying the birds to a distance from their island by means of a wounded one, and then shooting them, aided by the fact that the more there are wounded the more

come. The law must, of course, be a 3-mile limit one on the water. But is Mr. Hardy right in saying these islands are outside this limit? Any law you make must give the power to pursue these boatmen, or it amounts to nothing. I find we can raise the money to hire keepers.

The milliners say they can and do make beautiful decorations with the feathers of barnyard fowls. The gull they are now destroying is the big herring gull, mainly, and too big to be as suitable as domestic pigeons or any of the daintier poultry.

Another argument that should have weight is that no industry could have a right to extinguish from the world any form or type in nature, so that posterity shall be denied the sight of it. The few, at least, in Congress who have an inkling of the vitality in the life of students will see this point. No industry, least of all so ephemeral a one as the speedy rooting out of all the sea birds, could seem to have a right to damage the most vital interests of future nature students. Surely many of our Congressmen realize that the arts and sciences are to the nation's more materialistic life, like the body's lungs, wholly necessary to purify the blood, which in turn makes the muscles.

PRELIMINARY DESCRIPTION OF A NEW CARIBOU.

ERNEST SEYON-THOMPSON.

It has long been known among sportsmen that the caribou of the Western mountains differed strikingly from those found in the Barren Grounds, the Northern woodlands, or Newfoundland. The fine specimen brought from British Columbia by Dr. George M. Dawson, of the Canadian Geological Survey, has given me an opportunity of satisfying myself regarding the alleged differences. These are obvious, and are moreover coupled with the fact that this animal is geographically isolated from its near ally, the *Rangifer caribou*; so that I feel justified in giving it full specific rank. It is, therefore, designated *Rangifer montanus*, *sp. nov.*, the Mountain Caribou.

Chief characters: Its very dark color and its great size. In the latter particular it is said to equal, or even exceed, the *R. terra novæ*. The specimen brought by Dr. Dawson is now mounted in the museum of the Canadian Geological Survey at Ottawa, and I have to thank him for the privilege of describing it.

This specimen, which I make the type of the new species, is a male, and was taken on the Illecillewaet watershed, near Revelstoke, Selkirk Range, B. C., in 1889.*

It stands 46½ inches high at the withers; is 95 inches from tip of nose to root of tail; the tail is 5 inches long; the head,

from nose to occiput, 19¾; the hind foot, 26 inches; the ear, 7½ inches.

The general color is a deep umber brown, very glossy, and darkening nearly to black on the lower parts of the legs.

The neck is dull greyish white; also the underside of the tail, the buttocks, lips and belly. Along the ribs on each side is a greyish patch a little lighter than the surrounding brown.

The white fringe above each hoof is shining white and very narrow.

The antlers of this specimen are not noticeably different from those of the woodland species, but in general those of the mountain caribou are distinguished by their great number of points, a specimen with 72 points having been recorded. They are, I believe, less massive than those of the Newfoundland species.

The new species ranges or did range through the interior mountains of British Columbia, extending Northward into Southeastern Alaska, Eastward into the Rockies of Alberta, and Southward along the higher ranges of Idaho, half the length of that State. According to Lord, it formerly was found along the summits of the Cascade range as far as Oregon. It does not seem to occur at all in the coast ranges of British Columbia.

As far as I can learn, it is separated geographically from the woodland species by a vast caribou-less basin, running up East of the mountains as far as latitude 54°.

BIRD CARNAGE FOR EASTER BONNETS.

Wilmington, Del., Saturday.—To gratify the pride of the Eastern bonnet, a merciless slaughter of Delaware birds is in progress. To-day the steady boom of the hunter's gun resounded about Milford. Twenty thousand birds is the quota needed to supply the demands of fashion, and bluebirds, blackbirds, common crows, owls and meadow larks are the innocent sacrifices for the Easter parade.

Their skins are to be shipped to a New York firm of commission merchants, and will be sold to fashionable milliners.

The firm has arranged with a resident of Milford to meet the demands for feathers. Eight cents is the price to be paid for each bird that falls before the gun or is ensnared within the meshes of the night hunter's net.

Three days ago an agent of the New York firm consulted with the Milford man about the possibility of procuring within two months 20,000 birds of the varieties specified. A "sportsman" of local renown

* Mr. A. J. Stone, one of RECREATION's staff writers, killed 6 of these new caribou in the Dease lake region, B. C., in 1898 and shipped them out, but they did not reach New York until 1899. His report was forwarded to RECREATION and to the New York Museum of Natural history at the time he collected the skins but was delayed in transit.—EDITOR.

was called in, and soon the trio was beset by an array of gunners, lured by the tempting offer of 8 cents for each bird carcass with feathers or plumage in choice condition.

Fields and peach orchards now are alive with insectivorous birds, and "sportsmen" will have no trouble in bagging big strings. Snaring is a favorite method. The birds can be approached in the brush at night with great nets, in whose meshes they become entangled.

The collectors to-day received several strings of birds from hunters who ventured out in the morning. Crows and blackbirds are abundant, but there will be more difficulty in obtaining owls and larks.

The hunters do not take into consideration that the removal of 20,000 birds will give insects greater opportunity to ravage crops about Milford, and the farmers are active in the work.

President Alfred D. Poole, of the Delaware Game Protective Association, has taken official cognizance of the wholesale killing. Officials of the association will have their detectives alert to arrest violators of the stringent game laws. Mr. Poole is a wealthy manufacturer of Wilmington and a thorough sportsman. In a public letter he points out that bluebirds are protected by law and that for each bluebird killed the penalty is \$1 fine. Detectives will examine the shipments to New York to learn whether birds protected by law are killed. If any are found the person having them is liable to the penalty, as well as the person destroying birds.—New York Herald.

Here is another evidence of the greed, destructiveness and recklessness of the bird millinery people. It is astounding that the American public should so long have submitted to the murderous propensities of this trade. It is still more astounding that American women could be induced to sustain such wholesale murderers as these millinery bird skin collectors are. It is simply due to thoughtlessness on the part of women that this work is allowed to go on. If they would refuse to wear the feathers and skins of innocent birds, the dealers would quit buying them, and the American hunters would quit killing them. Will the time ever come when women will realize the enormity of the crimes they commit by encouraging the work of these bird destroyers?

What is the usual color of the mountain sheep? I have a sheep's head with horns $15\frac{1}{4}$ inches in circumference and $31\frac{3}{4}$ inches long. Its color is dark gray. The animal was secured in the Ten Sleep country, Wyoming, last fall. Are sheep darker in the fall than at other times?

D. C. Henry, Cotopaxi, Col.

ANSWER.

The color of the mountain sheep is, in November and December, a peculiar drab or gray, which is commonly described as slate color. The under parts, of course, are lighter. By the end of winter the clean bright color of autumn has considerably faded, and become gray and weather worn.

WISCONSIN BIRDS.

THEODORA M. TOWNSEND.

No State has a greater variety of birds than Wisconsin. We still have vast forests of oak and pine, unharmed by the axe of the chopper. Small lakes lie scattered here and there, their shores fringed with beautiful trees, and the rivers are shaded by bending willows. Thus Wisconsin is an ideal home for the birds. Many of the migrating thousands stop to rest and decide to stay with us. In the winter the chickadee and the saucy jay remain to cheer us.

St. Valentine's day arrives, and with it comes the horned lark. He never yet has failed us, and we learn to look for his coming. Later we awake on a sunny morning to hear the familiar call of the robins. Then follows the bluebird, and May brings the Baltimore oriole. He has returned to his old nest in the tall elm. Day after day, his modest little wife, in her gown of green, sits on the cozy nest, while he perches on a slender twig above her, his saucy black head tipped to one side and singing with all his might.

Drifting down the river on a summer afternoon we hear from a hidden thicket the catbird's cry; and a brown thrush, startled by our noise, flits away out of sight. We drift between the shaded banks and great fields of tall, wild rice waving in the summer's breeze. Hundreds of blackbirds are feeding on the seeds, and its frail stems are bent with their weight. A red-breasted grosbeak watches us from the branches of a wild apple tree; and in the shallow water of a sandbar, which reaches far out into the river, a little sandpiper wades in search of food.

Suddenly there is a flash of scarlet. It is the tanager; one of the most beautiful of Wisconsin's birds, flitting to and fro among the trees. In the sky above a huge hawk is sailing gracefully, with his wings spread wide.

In the twilight we moor our boat, and as we walk home the night hawks circle above us, uttering their shrill cries. Swallows perch on the telegraph wires with their heads beneath their wings and sleep.

Wisconsin's people realized, long ago, the value of the birds, and now our laws protect them all, save a few which do great injury. They are God's gift to man, a gift that we should treasure—frail crea-

tures, sent to cheer our earthly life. How is it possible that any woman can be so cruel as to wear the plumage of one of these beautiful creatures for personal adornment? How can any woman enter a church and pray God to forgive her sins while still wearing the wings or plumes of a bird that has been murdered to decorate her hat?

EFFECT OF SOLITUDE ON BIRDS.

A friend claims that if a pair of pet birds, such as canaries, etc., are placed together in a cage and left almost entirely to themselves they will in time grow lonesome, mope, become sick and die.

He contends that noise or association with others of their kind is absolutely essential to the welfare of birds. Also, that this rule applies to all animals, whether in a state of nature or domesticated.

Having cited no authorities for his stand and having had no practical experience, I venture to doubt the correctness of the statements.

Kindly let me know whether these contentions are correct, and what authorities, if any, support or negative them.

George M. Zotty, New York City.

ANSWER.

So far as I am aware no person has ever made experiments such as would be necessary to afford an authoritative answer to the question under discussion. It is quite possible there are some species of birds which would not thrive nor be happy if kept entirely isolated, even in pairs. Of course, the sad results of solitary confinement are well known, and its effects, while not so pronounced in the lower animals as in man, are yet strongly marked by melancholia, or what is sometimes called nostalgia, and general loss of health. The higher animals become almost as wretched in solitary confinement as man himself, although they do not so easily give way to insanity under such conditions.

In regard to birds, at least one author, Miss Buist, asserts that certain caged birds prefer solitude to society. On the other hand, it is undoubtedly true that many species are happiest in the company of man. At this moment I can not think of any species of birds which seem to me unlikely to thrive if kept in pairs in good surroundings entirely away from man. In other words, it is my opinion the contention that the presence of man is actually essential to the health and life of any bird in captivity, when the conditions of its captivity are otherwise satisfactory, is erroneous. For example, of all caged birds the canary is most dependent on man's companionship, yet I am perfectly certain that if a pair of newly fledged canaries were placed in a comfortable room and properly fed and

cared for they would not miss man's society in the least, nor be in any way affected by it. This, however, is only an individual opinion, and experiment might prove it erroneous. If the other party to the argument has any facts bearing on this subject, it would be interesting to have them published, with a full statement of the conditions.

W. T. H.

HOW REFORM GROWS.

C. C. PARSONS.

As fair she was as flowers that summer brings,

With tender heart, soft smiles, and all of that;

Yet o'er her head a dead bird spread its wings

Among the ribbons of her Easter hat.

"It needs just this to give it character,"
The "artist" said, combining hat and dove;

Alas for art! It took just that from her,
With those of us who right and justice love.

"Yes, slay the birds, rob every woodland glade,"

One said, made bitter by the poor bird's doom;

"Oh, you don't understand. These birds are made!"

The answer came, "Yes, made, but made by whom?"

"Dear me," she said, "how upright grow their ways!"

Then asked of him how he liked her new hat;

And he, whose part had ever been to praise,

Said, "Poor dead bird, I like it all but that."

She bought the hat to make a grand display,

To sate her pride and catch the jealous eye;

But ere a month its days had rolled away
She laid the gaudy thing, disgusted, by.

"They common grow, I doubt if they're good style"—

How comes it that such swift reform is born?

Upon a Dago woman's headgear pile
She saw a dove like hers, that Easter morn.

"Harold," said the dear girl, "am I the only girl—"

Harold groaned involuntarily.

—"am I the only girl you ever told she was the only girl you ever told she was the only girl you loved?"—Indianapolis Press.

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Sussex,	Isaac D. Williams,	Branchville.
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	C. M. Hawkins,	Roselle.
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Potter,	Byron Bassett,	Coudersport.
Crawford,		
(West half)	Jasper Tillotson,	Tillotson.
(East half)	Geo. T. Meyers,	Titusville.
Cambria,	W. H. Lambert,	720 Coleman Ave., Johnstown.
Beaver,	N. H. Covert,	Beaver Falls.
McKean,	C. A. Duke,	Duke Center.

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Kalkaska,	W. H. Dunham,	Kalkaska.
Kalamazoo,	C. E. Miller,	Augusta.
Sanilac,	W. D. Young,	Deckerville.

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Mecklenburg,	J. H. Ogburn,	South Hill.
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SOME GOOD GAME LAWS.

The Hon. John S. Wise, writing of the Silz case, says:

When the Federal Union was formed and the Constitution adopted, the States granted no power to the United States over the fisheries within their jurisdiction, or the subject of game and hunting within their limits. Concerning the former, the Supreme Court of the United States discussed the subject fully in the case of *McCready vs. Virginia* (94 U. S., p. 395). Concerning the latter, it fully discussed the subject in the case of *Geer vs. Connecticut* (161 U. S., p. 519), decided in 1895. In the *Geer* case the Supreme Court cited approvingly (p. 529) the language of the Supreme Court of California, which, speaking of the authority of the people as represented by the State, to whom the game was declared to belong, said:

"They may, if they see fit, absolutely prohibit the taking of it or traffic and commerce in it, if it is deemed necessary for the protection or preservation of the public good," in the case of *Ex-parte Maier*, 103 Cal., 476.

The Supreme Court also cited approvingly, in the same decision, the language of the Supreme Court of Illinois in *Magner vs. The People* (97 Ill., 320), decided in 1881:

"The ownership of the sovereign authority is in trust for all the people of the State, and hence, by implication, it is the duty of the Legislature to enact such laws as will best preserve the subject of the trust and secure its beneficial use in the future to the people of the State. But, in any view, the question of individual enjoyment is one of public policy and not of private right."

The case of *Geer* cited a number of State decisions, and the Court announced this general doctrine and included in their references the case of *Phelps vs. Racey*, 60 N. Y., 10. It is true that 2 of the judges dissented from the opinion (Field and Harlan), but their dissent, in my opinion, contained a weak argument and ignored the strong declaration of the majority.

The majority placed this right of the States not only on the ground above stated, but on the further ground that the State owed the duty to its citizens to preserve for its people a valuable food supply, and had the police power to enact such laws as would preserve it. In the *Geer* case, the Supreme Court of the United States sustained the constitutionality of a law which forbade the transportation of game killed within the State, beyond the limits of the State. It sustained it as falling within the principle settled in the *oleomargarine* cases (*Plumley vs. Mass.*, 155; *U. S.*, 461-473). In that case a State law was enacted to prevent the bringing into the State of *oleomargarine* unless identified as such. The object was plainly to prevent the practice of fraud on consumers. The law undoubtedly did incidentally affect interstate commerce, yet the Supreme Court sustained it as within the police powers of the State.

We have seen, therefore, that the right of the State to forbid the exporting of game killed in the State to a point beyond its own limits has been upheld. We are now confronted with the converse of the proposition. Can the State with the same object in view forbid the bringing into its jurisdiction for sale of game killed without its limits? I say that undoubtedly it can do so. We have seen the right of the State in regard to game announced by the Supreme Court in the *Geer* case, as embracing the power, to "absolutely prohibit the taking of it or traffic and commerce in it, if it is deemed necessary for the protection and preservation of the public good." We have heard this right planted on a double ground—the power to protect the property of the people and the police power to preserve a valuable food supply. We have seen a decision which, in the protection of the food supply, placed restrictions on an article of unlimited commercial traffic, to wit, butter; and it is demonstrable that, if game killed beyond the State may be brought in and exposed for sale within the State, every law of the State for the protection of the game within its own boundaries may be evaded and rendered null by the presence, against the law of the State, of foreign game.

There is no implied guarantee on the part of the United States that such an imported article may be sold everywhere. Innumerable instances might be cited in which imports, on which duty has been demanded and paid, have immediately, on reaching the community, been subjected to lawful restrictions and their sales limited, both as to quantity and location. The police power of the States over such has never been questioned. Drugs, for example; immoral prints and publications; things deemed moral in one section, and

the sale of which has been prohibited as contrary to public policy in another section. In all such instances, it has never been pretended that the importations thus brought in were, by the fact of importation and the payment of duties, exempted everywhere in the United States from local laws prohibiting their presence or sale as against public policy. Yet the argument here made is that the mere act of importation and payment of duty to the United States has invested these imported wild deer with such commercial interchangeability in every part of the United States that no State can forbid their unrestricted sale within its limits, and that, even if such sale vitally affects its laws for the protection of the common property of its people, and laws enacted to preserve to its people a valuable food supply, they must yield to the dominating power of Congress to regulate commerce with foreign nations and between the States themselves.

In the case of *The People vs. The Buffalo Fish Company* Judge Lambert has sought to fortify his argument by reference to some undefined treaties between England, Canada and this country, on the subject of fisheries. England herself has never recognized that any such treaties compelled her to surrender her right of self-protection or to preserve for her people this valuable food supply under her police powers. The argument shows a singular tenderness for treaty obligations with England which she has not discovered herself in her dealings with others. In the case of *Whitehead vs. Smithers* (2 C. P. D., 553) Lord Coleridge held exactly as I contend. An English statute forbade the possession of plover during the close season. A party imported dead birds from Holland and sold them in the British market, and Lord Coleridge decided that they fell within the prohibition of the English statute. He said:

"It may well be that the true and only mode of protecting British wild fowl from indiscriminate slaughter, as well as of protecting other British interests, is by interfering indirectly with the proceedings of foreign persons. The object is to prevent British wild fowl from being improperly killed and sold under pretence of their being imported from abroad."

In this brief statement lies the gist of the whole prosecution against Silz, and paraphrasing the language of Lord Coleridge, I state the case as follows:

It may well be that the true and only mode of protecting the game of New York State from indiscriminate slaughter, as well as of preserving for the people of New York a valuable food supply, is by interfering indirectly with the proceedings of persons in foreign countries or in other

States of the Union. The object is to prevent New York game from being improperly killed and sold under the pretence of its being imported from foreign countries or from other States of the Union. The object is legitimate. It is a reasonable law, enacted pursuant to a recognized power to preserve the game of New York and pursuant to the police power of the State to preserve for its people a valuable food supply, and it is a power which may be called into play notwithstanding its exercise may remotely or indirectly affect foreign or interstate commerce.

DON'T FAIL TO WRITE YOUR CONGRESSMAN.

The game law of Wisconsin has a provision in it which says that game wardens, constables and other officers of like powers in other States shall be authorized to act for the State of Wisconsin in seizing game in their States which has been illegally shipped out of Wisconsin. This matter has been brought to the notice of Mr. Loveday, the Illinois warden, but he refused to do anything, although he knows ruffed grouse and deer are being received here all the time, in a quiet way.

It seems to me we should have some duties assigned to us, who are members of the L. A. S., for the protection of game. I realize that you and your magazine are doing all that is being done. This is not fair. Besides, we are not employing an army of men who should be active. Without something to do interest ceases with very many.

The most important thing for us all is to concentrate our influence and efforts on the Lacy bill in Congress, H. R. 6,634. There are some good men in Washington who could help this thing along, and their aid should be requested.

Has there been much Western game in your market during the past season? I mean prairie chickens, ruffed grouse and quails.

The season in the West has thus far been favorable to game. The supply is good—better than for years at this season of the year.

M. R. Borten, Chicago, Ill.

ANSWER.

By all means write your Congressmen and Senators, urging them to vote and work for House Bill 6,634. Every League member has been personally asked to do this and to urge his friends to do so. I trust all will act promptly in this matter.—EDITOR.

LEAGUE NOTES.

Salisbury, Conn., Jan. 19.—James B. Scott, Edward Saunders, Albert Brizzie

and Benjamin Wilder, all of Millerton, N. Y., were arraigned before Justice Williams this afternoon, charged with taking pickerel less than 12 inches long, at Lakeville, and were fined \$1 each and costs, amounting to \$44. L. A. S. Warden H. L. Ross, of Canaan, was the prosecutor, and it is said this is the first time in the State that the law has been enforced since its adoption, about 3 years ago. Harrison Suydam, of Salisbury, was fined \$2 and costs, amounting to nearly \$25, for fishing through the ice, which is strictly prohibited. Suydam was unable to pay his fine and went to jail.—Conn. paper.

Keep it up, Doctor. The evildoers will all learn, in time, what this League is for.—EDITOR.

Two new divisions have been organized within the past month. The Idaho, with the Hon. M. Patrie, Secretary of State, as Chief Warden, and the Iowa, with Mr. D. E. Stuart, a prominent lawyer of Council Bluffs, as Chief Warden. Several other States are close up to the score, and I shall soon have the pleasure of announcing that they have been put on the firing line. If all sportsmen would only do their duty in this matter we should have working divisions in all the States and Territories of the Union within 3 months. Interest in the work is steadily growing and spreading, and we shall cover the whole continent in the course of time.

Mr. J. T. Herrick, Springfield, Mass., and F. Sandford, Plainfield, N. J., have paid their membership fees 10 years in advance, and a gold badge has been sent each of them. We have several more of these awaiting claimants, on the same basis. Why not send in your check and get one? Then you will not be troubled with the annual reminders, and will not be under the necessity of writing a one dollar check each year.

On the date of the Second Annual Meeting, the L. A. S. had 2,327 members. We have enrolled over 300 since that date, so that the total number is now 2,634. The steady growth of this League, and the fact that it is convicting law-breakers every week, must be bad medicine for the Ancient Defender of Game Hogs, the editor of which predicted, in February, '98, that the League would not succeed.

The League has now 12 life members, and we hope to have 100 by the end of this year. Will you not allow us to enroll your name as one of the remaining 88?

FORESTRY

EDITED BY DR. B. E. FERNOW,

Director of the New York School of Forestry, Cornell University, assisted by Dr. John C. Gifford, of same institution.

REPLANTING BURNED FORESTS

H. G. COMSTOCK

I hand you herewith a clipping from the Call, which I trust you will reprint, as it bears on an important subject, not only on the water supply, but on the protection of game.

Pasadena, Oct. 19.—Work of replanting the burned forests of this section will be begun in a few weeks as an experiment. Acting Chief Forester J. W. Toumey, of Washington, was here recently and made an inspection trip by carriage along the foot of the mountains from Arroyo Seco canyon to Santa Anita canyon. As a result of what he saw of the burned districts he has promised to use his influence with the Government for an appropriation of several hundred dollars to plant seeds in the burned areas next spring.

Ex-Mayor T. P. Lukens and W. G. Kerkhoff are going to do some planting on their own account, however, whether the Government acts or not. The water sheds have been denuded, and unless trees can be made to grow in the mountains North of this city the city's water supply will go. Water has been very scarce all summer, so scarce indeed that street sprinkling had to be stopped for a time, in half the city, and some of the higher residents could not get water in their bath tubs.

Mr. Lukens has devoted his time of late to studying forestry just out of pure love of it. When he is in the mountains he carries a sharp stick, with which he thrusts into the ground seeds of pine trees that he happens to see. The seeds will not grow usually unless helped along by artificial means. Mr. Lukens thinks that if everybody would do just that much many trees would spring up where now seeds decay. He spent the entire summer in Bear valley, where he built a little house far up in the mountains surrounded with all facilities for studying and developing seeds of all sorts. One hundred pounds of seeds that Mr. Lukens has prepared will arrive shortly and will be planted in the mountains. Forest Rangers Lew Newcomb and John Hartwell went to the mountains to-day to carry out this scheme of Mr. Lukens and Kerkhoff. They will establish a camp on the Ridge between Eaton's canyon and the Little Santa Anita. They will cut fire tracks along all ridges to the main ridge. These tracks are paths through the brush about 6 feet wide, cleared entirely of brush and leaves, so that fire cannot cross. They also furnish avenues of access to fires. Newcomb will plant along these fire tracks seed of the *pinus tuberculata*, or hickory pine, which Mr. Lukens has been propagating.

The hickory pine is a native of San Bernardino county and grows there profusely. The seeds are found scattered about the ground. Heat opens them and the process is difficult, because a little too much heat will kill the seed. The tree is practically fire-proof. When a fire strikes it it burns a little way, if it has a good start, and then dies. Sometimes the tree reaches a height of 100 feet, but not often. It grows rapidly. Mr. Lukens has found by experimenting that the tree grows so rapidly that if the seed were planted along the mountains 3 feet apart in 5 years they would cover the area almost impenetrably. The seed must have care, however. It should be planted at the side of a stone or stick so the sun's rays will not wilt the young plant. Seeds planted last July by Mr. Lukens have attained a height of 3 inches already.

When Newcomb and Hartwell have planted the ridge between Eaton canyon and Little Santa Anita they will plant between Big Santa Anita and Little Santa Anita.

The forestry people agree with Mr. Lukens that the first area to be planted is that which has been burned, partly as a protection to the native forests now standing,

for the fire will stop when it strikes *pinus tuberculata*. Then, too, the canyons ought to be planted, because it is in the canyon that the fire usually starts. If these places were planted the forests would be valuable, not alone as preservers of moisture, but the wood is hard and available for use in making ax handles and the like.

This section is stirred up over the preservation of the forests, because so many fires have occurred during the past year or 2. There is great trouble in getting the Government to make appropriations. A sum has been secured, however, for the good work of building trails through the mountains and getting out the dead timber. All rangers have been instructed by Mr. Toumey to make careful inspection through the forests and estimate the amount of dead logs that exist. This estimate will be submitted to the Government and the logs will be sold to men who haul them away. When fires occur they get into the logs and burn for days and weeks, spreading the sparks to new territory after the fire was supposed to have been all put out by the fighters. Sometimes logs roll long distances out of burned districts into unburned districts and start new fires. Especially is this true when the logs roll into short brush which readily ignites.

Unless we protect the forests from fires, timber thieves and tramp saw mills, there will be no natural homes for our game and fish. I say fish advisedly, for the Government hatchery at Baird's, on the McCloud river, was only able to take 8,500,000 salmon eggs this season, as against 18,500,000 last year. This was because the water was so low in the Sacramento river, into which the McCloud empties, that the fish could not get up the river. The low stage of water is due to denuding the mountains of trees. When you take into consideration that mills in this vicinity are sawing pine that will only square 8 inches you can form some idea of the devastation in their locality. To make the destruction more complete, after the mills have gathered their harvest of pine they sell the remaining trees to woodcutters, who leave nothing that will make 2-foot engine wood for the railroad.

I am glad to see forestry have a place in RECREATION, for I believe much will be gained by interesting your many readers in the preservation of our woods. Mr. Lukens has taken a long step in the right direction, and his example should be followed by the Government.

LEARN THE CORRECT NAMES

I am pleased to see you have added a Forestry Department to RECREATION. Will its editor kindly set me straight on the following subject? In the Savannah river swamps there are trees variously known as sycamores, poplars, cottonwoods and tulip trees. How many distinct trees to which any of these names can be correctly applied are there in the Savannah river swamps;

and how may they be distinguished from one another?

W. C. Baker, Graniteville, S. C.

ANSWER.

Bulletin No. 17, Division of Forestry, U. S. Dept. of Agriculture, gives the names of all the trees of the United States, and especially the common names applied in the various parts of the country. In that you will find the name sycamore is applied only to 2 genera of trees, with 3 species; the planer tree, in addition to the sycamore, being found in Savannah river swamps. There are at least 3 poplars, and the tulip tree is often also called poplar. Of cottonwoods there are 9 different species in the United States. As a rule these are correctly so called, except that the linden or basswood is sometimes called cottonwood in Kentucky.

To enable you to recognize the species you should secure a botany. A. C. Agar's "Trees of Northern United States" would perhaps cover most of the trees found in South Carolina, if no more comprehensive botany is accessible. It might also be well to secure Bulletin No. 6 of the North Carolina Geological Survey at Raleigh, N. C., which describes the trees of that State fully.—EDITOR.

A REPLY TO MR. MAHON.

CHAS. CRISTADORO.

Mr. Mahon paid me the compliment in a recent number of *RECREATION*, of referring to my article in the October number of that magazine on the National Minnesota Park. Mr. Mahon states that he has "no connection with pine lands or lumber." From the continuous and persistent opposition he has shown to the park I judge he is a lumberman, because to-day in the State of Minnesota the lumbermen are the only ones who oppose the park, with no other reason than that they want the standing pine on the park site.

Has Mr. Mahon, in his delightful and childlike ignorance of the lumbering business, ever heard of a man's cutting trees in the woods off from land belonging to either the State or the U. S. Government? Has he ever heard a rumor of a timber pirate's being prosecuted and made to refund the value of such stolen timber? Does Mr. Mahon realize that after a man has cut timber not his own he is likely to attempt to destroy partially or wholly the evidence left behind him? Does Mr. Mahon know that after first seeing that no logs are left bearing the mark of the lumber pirate the said pirate will put fire into his tops, and that the fire, sweeping through the cuttings, will char the tops and stumps, making it difficult for an inspector to say whether the timber was cut a month ago or 3 years ago? If, in his infant inno-

cence, Mr. Mahon does not know all this, let him ask some old lumberman the value of pine stumpage. Too well do I know it has advanced. Mr. Mahon has attempted to make one incident of a man valuing his stumpage more, because of the Park timber being withdrawn, cover the whole proposition of an advance in stumpage from Maine to California, even to the extent of raising the value of the despised hemlock to the level of low grade pine.

One of the arguments used against the Park was the very one that gave the lumbermen credit for the whole Park scheme. I think somebody accused our lumber king, Tom Shevelin, of that piece of Machiavelian diplomacy. Agitate for the Park! That will result in taking out of the market millions of feet of timber. It will raise the value of the stumpage we already own. We will hold the Park agitation along for 3 or 4 years until our timber is gone. Then we can exert enough influence politically to kill the Park, swoop in and get the lumber from the Government on the homestead \$1.25-an-acre plan, and there you are!

This plan, to my own knowledge, was actually charged up to the long-headed, general tactics of Tom Shevelin. I simply repeat it to illustrate to Mr. Mahon the drift of opinion in some quarters as to the influence the shutting up of this park area would have on the price of standing timber.

As to Duluth, I believe I know enough of the geography of Minnesota to know that the logs cut in the vicinity of the proposed National Park are tributary to Minneapolis because of the waterway. But the lumber camps in that region were it cut over, would have to be provisioned, and that would be done by the merchants of Duluth. It was the temporary gain of that trade which blinded the first Duluth protestants to the ultimate and continuous monetary benefits that would result from the establishment of the Park. If the loss of such trade threatened the future prosperity of Duluth, as some of the original objectors would have it, then surely Duluth's future was not a brilliant one. What Mr. Mahon means by asking if it is ignorance or something else that prompted such statements on my part, I am at a loss to know. I can only reply by asking Mr. Mahon whether it is "ignorance or something else" that makes him an opponent of the Park project, the greatest proposition ever put forth toward the permanent welfare and prosperity of Duluth.

I would call attention to the fact of the Development Committee of Duluth voting with but one dissenting vote for this park. That happened recently in Duluth, but no doubt this will be the first intimation Mr. Mahon has had of it.

The New York State College of Forestry has its junior and senior classes this spring at Axton, in the College Forest, which is situated in the Adirondacks near Tupper lake. There, under the guidance of 2 professors, the young men will apply the theoretical knowledge gained in the class room in actual practice.

Among the lecture courses there are 2 entirely novel ones, which will interest the readers of *RECREATION*, namely, one on Fish Culture and one on Game Preservation. These are the first attempts at systematic teaching of these 2 subjects.

The course on Game Preservation will be given by Dr. Gifford. The course on Fish Culture will be in such competent hands as those of Prof. Barton W. Evermann, well known as an authority on fishes, fish culture and as the Ichthyologist of the U. S. Fish Commission.

The course will consist of a series of daily lectures for 2 weeks with laboratory work, field excursions to the ponds, lakes and rivers, and visits to the State Hatchery at Clear Water, within a few hours of Axton. One or more lectures will be devoted to the following subjects:

1. Natural reproduction among fishes; manner of fertilization; conditions under which spawning takes place; dangers which beset the eggs, the fry and the young; necessity for artificial propagation; natural and artificial methods contrasted.

2. The species of fishes propagated artificially in America; the spawning time, place and habits of each, especially those native to the State of New York.

3. The Salmonidæ, or salmon trout and whitefish; methods of artificial propagation in detail.

4. The bass and other Centrarchidæ; methods of culture.

5. The shad, wall-eyed pike, etc.

6. The care of fish fry.

7. Methods of shipment of eggs, fry, fingerlings and adults; how plants of fish are made.

8. Pollution of streams and lakes and fish protection.

9. Fish Culture in America, its history and results.

Various other phases of fish culture not especially mentioned in the headings given above will not be omitted in the lectures, nor will object lessons in the field be wanting.

In order to make this interesting and novel course accessible to others outside the students of this college, such a limited number of visitors as can be accommodated either in or near Axton will be welcomed without extra charge except for board and other accommodations. Those intending to participate are advised to cor-

respond at an early date with the Director in order to secure quarters in the order of application.

THE FOREST-TENT CATERPILLAR.

Lately, however, the sugar maple trees of the Northeastern part of the United States have been seriously infested by an insect pest called the forest-tent caterpillar. Several fine orchards have been killed by this pest. In many places the trees have been twice completely defoliated. If this pest continues, the whole industry is in jeopardy. Fortunately, this insect has an enemy in the form of another insect called the ichneumon fly. This fly was very abundant last year, and many have hopes that the forest-tent caterpillar will not be able to survive much longer. The ichneumon fly deposits its eggs under the skin of the caterpillar. These hatch out and feed on their host. Thus one thing feeds on another. In fact, nature is practically one set of wheels within another. When one thing is interfered with, the whole machine is more or less affected, and it is often some time before an equilibrium is again established. As long as we recklessly destroy the birds and other animals which feed on these pests, the more likely are such calamities to occur.

SEEDLINGS.

It has been recently stated in the newspapers that some of the larger Western reservations will be reduced and portions not necessary to forest preservation restored to the public domain, while smaller reservations will be created. These will be selected after careful consideration, and will include headwaters of streams, tracts of land where fire has destroyed the forests and a new growth has been started, and picturesque and rare physical formations which may be desired in the future for national parks. Nearly all the Western men have agreed to this arrangement, and the belief is general that it will be adopted. This will settle only one phase of the matter, as there is still a wide difference of opinion as to what regulations shall be made regarding grazing of cattle and sheep on the reservations. The stockmen all over the West demand the right to pasture their herds and flocks in the reservations, while the forestry associations vigorously oppose the proposition.

"How foolishly men destroy the forest cover without any regard for consequences, for thereby they rob themselves of wood and water!"—Humboldt.

PURE AND IMPURE FOODS.

"What a Man Eats He Is."

Edited by C. F. LANGWORTHY, PH. D.

Author of "On Citraconic, Itaconic and Mesaconic Acids," "Fish as Food," etc.

RENOVATED BUTTER.

Harrisburg, Pa.

In your September number I notice an article on Renovated Butter. I send you a circular lately issued by the Dairy and Pure Food Commissioner of this State, who, by the way, is the originator of the term "renovated butter." Mr. Wells tells me he is now satisfied that while the putrid odor attached to this mixture before it is subjected to the renovating process is removed by that process, the putrid condition, with all of its disease germs, still remains. Nature's flag, the odor, has simply been hauled down and the stuff rendered, because of the lack of such warning, much more dangerous.

Joseph Kalbfus,
Secretary Pennsylvania Game Commission.

FROM ANNUAL REPORT OF THE DAIRY AND
FOOD COMMISSIONER FOR 1898.

It may be of interest to many to know what renovated butter is. It is also known under several alias, such as boiled, process, and aerated butter, and is produced from the lowest grade of butter that can be found in country stores or elsewhere. It is of such poor quality that in its normal condition it is unfit for human food. It is generally rancid, is often filthy in appearance, and of various hues in color, from nearly a snow white along the various shades of yellow up to the reddish cast, or brick color. It is usually packed in shoe boxes or anything else that may be convenient, without much regard to cleanliness or favorable appearance. The merchant is glad to get rid of it, with its unwholesome smell, at almost any price, usually expecting it will find its way to some soap factory where it naturally belongs; but in this he is mistaken.

We have in our State 2 extensive plants using large quantities of this original stock, and converting it into what is often branded and sold for creamery butter. It is first dumped into large tanks surrounded with jackets containing hot water, and melted at a temperature ranging from 100 to 110 degrees Fahrenheit. After being thoroughly melted the heavier solids sink to the bottom and the lighter particles rise to the top. When these are skimmed off, the clear butter fat is left with the heavier sediment at the bottom.

This butter fat is then removed to other tanks, jacketed and surrounded with hot

water like the first. The odor of the fat at this stage is anything but agreeable, and the main object of the next manipulation is to remove the stench from it. This is supposed to be accomplished by aeration, the fat passing out of a pipe at the bottom of the tank. With a rotary pump it is again elevated in a pipe over the top of the tank, and discharged through a strainer into the same. Thus, to remove the disagreeable odors, a continuous circuit and agitation of this liquid butter fat is kept up. It is claimed by some that chemicals are also used for this purpose; but I have been assured by persons engaged in the business that this is not true. When the fat is sufficiently aerated the machinery is changed by removing the funnel shaped strainer, and large quantities of skim milk are added; in just what proportion I am unable to state, but can approximate the quantity. An analysis of the finished product showed only 75 per cent. of butter fat, and as it contained nothing but the fat and milk and a small amount of salt, there must have been about 25 per cent. of milk added. A perfect emulsion of the milk and butter fat is obtained by the same machinery that did the aerating, excepting the strainer, and it is accomplished in a very short time. When the milk has all disappeared the melted mass looks much as it did before the milk was added.

It is next run off in pipes to a vat of ice and water, where it is quickly chilled, taking the granular form and looking like ordinary butter before being worked. It is then worked, salted, if necessary, and printed or packed in tubs for shipment, often as fresh creamery butter.

I do not know how a greater fraud could be perpetrated on the unsuspecting consumer or on legitimate dairy interests, than is done by these manufacturers of spurious butter. In the first place, 20 to 25 per cent. of the compound is skim milk, for which the consumer pays the price of butter. Besides this, the filthy condition of the foundation stock before any manipulation occurs, were it known, would deter people from eating it. It certainly should only be allowed to be sold for what it is, namely, renovated butter. It is a fraud because it has no keeping qualities. Being so heavily charged with skim milk, unless kept at a low temperature, it soon becomes putrid. The manufacturer and jobber may get it off their hands before it deteriorates, but be-

fore it gets to the consumer, usually, its last estate is worse than its first.

THE VALUE OF WASTED FOOD.

The food actually consumed in almost all families is less than the amount purchased, owing to waste in the kitchen and on the table. By the term waste is meant not the inedible portions of the food materials, such as bone, tendon, vegetable parings, etc., unless these are very large in proportion, but those portions of the food which, though edible, are thrown away. The amount of such waste varies greatly in different families. In some cases recently investigated by Professor W. O. Atwater and his associates who have carried on many dietary studies of families in different circumstances in different regions of the United States, in connection with the investigations of the United States Department of Agriculture, the waste has been found to be small and in other cases it has been nearly $\frac{1}{5}$ of the total food purchased. Generally speaking, the amount of waste has been found to be greatest in those families who could best afford it. That is, those who have the largest means have been least careful about the economical use of food.

This is not always the case, however, and occasionally an unusually large proportion of waste has been observed in the diet of those who can least afford it. This is illustrated in the diet of a family of limited means living in the thickly congested tenement district of New York. They had only about one-half the quantity of nutrients found in the average diet of the man at moderate work, and yet nearly 6 per cent. of the total food purchased was wasted. The average waste found in 14 mechanics' families in such circumstances that they were not necessarily restricted in their choice and use of food, amounted to 6 per cent. of the total nutrients purchased; that in professional men's families to a little over 3 per cent. It is of interest to note that, while the professional man was paying 28 cents a day for his food and the mechanic 19 cents, the former only wasted half as much as the latter.

Much of the waste in the household might be avoided by greater care in purchasing, preparing and serving food. It would hardly be possible to do away with all waste, but a considerable saving of money might often be effected without lessening the attractiveness of the daily fare. The means of each family should, of course, be an important factor in regulating waste, but the problem is worthy the attention of all.

Good management, both on the farm and in the household, demands that all sources of waste be guarded against. If waste be permitted, economy requires that all such

materials, as well as other by-products be utilized to the best advantage. That the kitchen and table wastes are more important sources of loss than are generally realized is brought out quite strikingly by some recent investigations.

The kitchen and table refuse and waste in a family consisting of one man, one woman, 4 boys and 2 girls was collected and analyzed during 3 weeks. During this period there was thus collected 95.96 pounds of material, of which about 70 pounds was vegetable matter. The quantities which would be collected in one year at the above rates would amount to 1,200 pounds of vegetable matter and 455 pounds of animal matter. This material would contain about 4 per cent. of fat, 4 per cent. of ash and 19 per cent. of organic matter.

It is calculated that there could be gathered annually from 20,000 people about 2,080 tons of garbage with an analysis and value equal to good barnyard manure. By treating with suitable solvents and drying the residue there could be secured $388\frac{1}{2}$ tons of fertilizer worth \$14.69 a ton, and over 81 tons of grease, which sells for an average of \$70 a ton wherever this system is in operation. By cremation there would result 831.5 tons of ashes, worth \$28.53 a ton.

The total population of the cities and towns of New Jersey is approximately 918,722, and the garbage of this number of people would amount to 95,516 tons per annum, from which could be manufactured 17,848 tons of tankage, worth \$262,180, and 3,726 tons of grease, worth \$260,800, a total of \$522,980.

COLD STORAGE GAME IS UNFIT TO EAT.

The cold storage men in this city are making desperate efforts to get some kind of a bill through the Legislature that will again allow them to sell game all through the year; and it is possible they may succeed by some clandestine movement. It is, therefore, the duty of every member of the L. A. S., and every true sportsman in the State, to keep careful watch on all bills introduced and passed by the Assembly, at each succeeding session, in order to prevent stealthy amendment to any bill that would give these cold storage men, or the gamedealers, any advantage.

It is also the duty of every sportsman to do all possible to educate the public to the fact that cold storage game is not fit to eat in any case. Personally, I would just as soon eat sawdust as to eat a bird or a piece of venison that has been frozen and stored for a month.

I reprint here an article published in June, '98, *RECREATION*, and written by Dr. Robert T. Morris, one of the most promi-

ment and thoroughly scientific physicians in the United States:

Answering your query about the unwholesomeness of cold storage game, I would say that when albuminous substances, like meat, milk, eggs or cheese are subjected to a temperature sufficiently low to prevent the free development of the common bacteria of putrefaction, they seem to be still open to attack by certain saprophyte bacteria, the toxins of which are harmful. These toxins in milk, ice cream and cheese often prove violently poisonous, and many fatal cases are reported.

In meats, especially in cold storage game, the toxins do not often accumulate in sufficient quantity to produce dangerous symptoms, but they are apt to cause severe gastro-intestinal irritation, and I presume few people who have eaten much cold storage game have failed to suffer at least from diarrhoea from its effects. One might eat a good deal of cold storage game before coming upon any important quantity of toxins, but there is always so much speculation about it that when ordering game at a restaurant I make the waiter interview the chef to make sure no cold storage game will be sent to fill my order. Cold storage game is not served at any decent restaurant because it loses flavor and juice to such an extent that a good class of people keep away from any place where such stuff is served to patrons. A certain restaurant near here is in disfavor with several patrons whom I know because the steward, apparently, wishing to economize, tried to deceive patrons with cold storage game. Perhaps he rendered a bill for fresh game and pocketed the difference in price. I do not know about that, but I do know there was an exodus of good game patrons. Restaurateurs do not know why they lose such customers, but the customers know and they tell other people. Every first class restaurant should state on the menu that no cold storage game is offered to tempt the palates and to test the inwards of the guests.

Yours truly,
Robt. T. Morris, A.M., M.D.

When the public shall have been thoroughly educated on this subject, and when the people who now pay exorbitant prices for game dinners at big hotels or restaurants, once learn that they are being buncoed, an important step in the cause of game protection will have been achieved. When these people learn that a freshly killed domestic fowl is better and healthier than a refrigerated game bird, and that the former can be bought at one-quarter the price which they pay for the latter, then will they learn

to eat good, wholesome food, instead of the dry, flavorless, poison-tainted game for which they have been paying war prices.

FISHES AS FOOD.

The mode of capture affects the food value of fish. Fish caught by the gills and allowed to die in the water by slow degrees, as is the case where gill nets are used, undergo decomposition very readily and are inferior for food. Fish are often landed alive and allowed to die slowly. This custom is not only inhumane, but lessens the value of the fish. It has been found that fish killed immediately after catching remain firm and bear shipment better than those allowed to die slowly. The quality of the fish is often injured by improper handling in the fishing boats before placing on the market.

The flavor of oysters is affected more or less by the locality in which they have grown, those from certain regions being of superior quality. The season of the year affects the market value of oysters, although it is noticeable that as methods of transportation and preservation improve, the oyster season becomes longer. This may also be said of lobsters, crabs, etc. Investigations have shown that oysters rapidly deteriorate when removed from the water, through the fermentative action of bacteria, and that oysters in spawn deteriorate more rapidly than at any other season at the same temperature. However, oysters which are ready to spawn are considered especially palatable if cooked soon after removal from the sea bed.

Horse Owner—Suppose the motor of your automobile gives out when you are half way between towns. What then?

Horseless Carriage Owner—Well, I would not be any worse off than if I were half way between two towns with a horse and buggy and the horse should die.—Chicago Tribune.

“Did you have a good passage?” was asked of a recent traveler.

“Fair; but I couldn’t sleep. The first three nights I couldn’t tell whether to shut the porthole and go to bed, or to close the bed and go to the porthole. And the last three I spent in reading the Customs Laws.—Life.

Great Oversight.—“Did you know the world is to come to an end next week?”

“If you knew that why didn’t you tell me sooner? Here I went and paid my gas bill this afternoon.”—Indianapolis Journal.

BOOK NOTICES.

UNWISE ILLUSTRATIONS.

Eugene McCarthy, the old time champion of the ouananiche, has written another book dealing with that famous fish, as well as with the brook trout. The title of the book is "A Tale of Lake St. John," and the title page says it comprises a bit of history, a quantity of facts and a plentitude of fish stories. This is certainly a comprehensive and most enticing field, and Mr. McCarthy is so thoroughly at home in the Lake St. John region, and so expert in the handling of both the pen and the rod, that he could not fail to render such a theme deeply interesting.

The book is beautifully illustrated with half tone reproductions of photographs. The frontispiece shows a pretty girl in the act of casting a fly in the rapids of a Canadian river. Her costume is so neat and comfortable, and the surroundings so picturesque, that it should inspire thousands of women, whose nerves are racked by family cares and social whirls, to seek the wilderness and do as this woman is doing.

There is another full page picture of another pretty girl, or possibly the same one, kneeling beside a caribou which she is supposed to have killed.

There are several fine views of Lake St. John scenery, and of camps, fishing parties, etc., that are exceedingly refreshing in these winter days, when we are confined to the house by the edict of Jack Frost.

Mr. McCarthy has, however, unfortunately reproduced 2 pictures here that should not have been admitted to any such work. One is entitled "A 4 Hours' Catch of Ouananiche" and shows 14 fish, which would apparently weigh 2 to 3 pounds each. The other picture is labeled "A Trout Catch for 2," and shows 61 trout that would seem to weigh from one-half pound to 3 pounds each. These illustrate the same kind of extravagant slaughter, and the same disgusting advertising of it, that is so rigorously condemned by all decent anglers.

In spite of these defects, Mr. McCarthy's book is well worth the price, and should be in the hands of every lover of the rod and reel. For sale by the author, Eugene McCarthy, Syracuse, N. Y. Price, 25 cents.

DINWIDDIE'S PUERTO RICO.

Since Puerto Rico came into the possession of the United States no fewer than 6 books treating of the island have made their appearance. In many respects the best of these is that by William Dinwiddie,

who, under the direction of Harper & Brothers, spent 2 months on the island. During that time he was constantly in touch with the leading Spanish citizens and native Puertorriqueños, who were importers, manufacturers, shopkeepers, estate owners, lawyers and politicians, and he has, by the aid of the varying opinions elicited, embodied in this book a crystallization of the most valuable ideas expressed. He treats, in order, the prevalent diseases and hygienic precautions, the geology, industrial possibilities, including coffee, sugar and tobacco culture, and fruit raising, home life, life among the peasants, the principal cities, schools, revenues and taxes, courts, political methods, and, in closing, gives an interesting historical sketch. All these subjects are treated intelligently and fully, and the conclusions may be accepted as reliable. The book is tastefully gotten up and is beautifully illustrated with about 50 photographs taken by the author.

Puerto Rico, its Conditions and Possibilities. By William Dinwiddie. 8vo, pp. 294. Price, \$2.50. Harper & Brothers, New York.

The report of the New York State Fish, Game and Forest Commission for 1897 has just appeared. It is a voluminous affair, on good paper, well bound and profusely illustrated. By far the best part of the report is by Colonel William Fox on the maple sugar industry and other forest topics. The State of New York owes a debt of gratitude to Colonel Fox, who has worked long and assiduously for the preservation of the forests of this State. His article on the maple sugar industry is without doubt the best in every way that has ever been written on the subject. It is illustrated by several handsome half-tones, and should be reprinted separately and distributed throughout the State to those who are unable to secure or not desirous of having the whole report. It would induce many farmers throughout the State of New York to take more interest in their sugar maple groves.

A revised and enlarged edition of "The Essentials of Elocution," by Alfred Ayres, contains new chapters on thought and expression which add greatly to the value of the book. Mr. Ayres is, of course, recognized as the leading authority of this country on elocution and kindred subjects. The book is for sale by Brentano, New York.

EDITOR'S CORNER.

The Sixth Annual Sportsmen's Show, which was held at Madison Square Garden, March 1st to 17th, 1900, was a complete success financially. The Garden was packed every night, and was comfortably filled every afternoon during the entire period, and the management announces that over 135,000 people paid admission at the gate.

The ground floor of the Garden was tastefully and liberally decorated with evergreens, giving the visitor a forcible reminder of the pine woods, when entering the arena. The next thing to attract attention was a liberal exhibit of live wild animals, such as buffalo, elk, bear, deer, wolves, panthers, etc.

There were a number of coops of game birds, and several tanks of game fishes. The aquatic sports in the artificial lake delighted thousands of visitors during afternoons and evenings. Many of the old time exhibitors and some new ones were on hand. Prominent among these I recall:

E. I. Dupont De Nemours & Co., Thos. W. Fraire, Laflin & Rand Powder Company, Lefever Arms Company, Schoverling, Daly & Gales, D. T. Abercrombie & Co., Pantasote Leather Company, Remington Arms Company, Bridgeport Gun Implement Company, Peters Cartridge Company, King Powder Company, Dr. Robert B. Cantrell, Savage Repeating Arms Company, Union Metallic Cartridge Company, Page Woven Wire Fence Company, Lozier Motor Company, Pennsylvania Iron Works and the Canadian Pacific Railroad.

The usual rifle and revolver tournament in the basement and the trap tournament on the roof drew crowds of shooters interested in these various sports, all of whom thoroughly appreciated an opportunity to pull trigger during the winter season, when outdoor sports are quarantined by Jack Frost.

Several of the old time exhibitors, such as the Winchester Repeating Arms Company, the Parker Gun Company, the Stevens Arms Company, and others, were not represented at this show, and I heard hundreds of visitors express regret at this. A Sportsmen's Show without such well-known houses is like Hamlet without Hamlet.

The friends of RECREATION are still responding most generously to my appeal for live animals for the RECREATION Group in the New York Zoological Park. The following specimens have been received since the last report:

Jan. 11. Fox Squirrel. One specimen, presented by C. O. Goodwin, Pleasant Lake, Ind.

Feb. 5. Wild Turkey. Five specimens, presented by A. E. Pond, New York City.

Mar. 1. Porcupine. One specimen, presented by Percy Selous, Greenville, Mich.

Mar. 9. Red Fox. One specimen, presented by The Brown's Tract Guides' Association, through A. M. Church, Old Forge, N. Y.

Mar. 14. Raccoon. One specimen, presented by F. D. Matson, Floridaville, N. Y.

Mar. 30. Porcupine. One specimen, presented by B. G. True, Clinton, Maine.

I trust that readers who have not yet contributed to this group may find an early opportunity to do so.

Captains Charles W. Laird and Charles S. Wheeler, of Washington, came over to the Sportsmen's Show prepared to spend several days in seeing that, and the other attractions of this city, but their visit was rudely broken off by the receipt of a telegram stating that Captain Wheeler's son had met with a serious accident. He and his wife returned to Washington at once, and he wrote me soon after that, though the boy's skull had been fractured by a fall, he was rapidly recovering.

Both of these gentlemen are old time sportsmen, and Captain Laird was for many years a member of the Columbia Long Range Rifle Team, which went to England years ago and brought back a valuable trophy.

The President of the League was recently invited by the Hon. John F. Lacey to attend a public hearing given on his bill for the perpetuation of the buffalo. I went to Washington, and, with the Hon. C. J. Jones and Dr. C. Hart Merriam, was given a cordial hearing by the Committee on Public Lands, which had Mr. Lacey's bill in charge. We gave the committee some weighty reasons why the bill should become a law, and at the conclusion of the arguments the committee unanimously decided to report the bill favorably. It is earnestly hoped it may pass the House. Then the League will follow it through the Senate.

Colonel C. J. Jones, of Kansas, brought 6 buffaloes to New York a few days ago, 4 of which were shipped to Carl Hagenbeck, Germany, and 2 to Austin Corbin's big game preserve in Vermont.

It is a pity that any of these animals should be allowed to leave this country; but Congress has been slow in acting on Jones' bill for a buffalo preserve, and he has found it necessary to sacrifice a few of his animals in order to meet his obligations. It is hoped his bill may soon become a law, and that the few remaining buffaloes which Jones and Colonel Goodnight have may be permanently located within a wire fence.

PUBLISHER'S NOTES.

A NEW CAMERA IDEA.

In December RECREATION I announced that a new style of camera was being made, and that it would be put on the market at an early date. The coming of the camera has been delayed several months beyond the time previously announced; but it is here, and is so much the better for the waiting. It is called the Reflex, and is made by the Reflex Camera Company, Yonkers, N. Y.

This camera has several qualities about it that make it especially attractive to sportsmen. I need not take time to list these, because the company has issued a catalogue that gives all the information any one could possibly desire. Furthermore, it contains some beautiful full page original photographs, pasted on the leaves of the book, that any artist would be delighted with. One of these, showing the U. S. cruiser Raleigh in the Hudson river, is alone about worth the price of admission. Another shows a group of nearly 200 ladies and gentlemen on the Ardsley Golf Links, and is one of the most beautiful golf pictures I have ever seen. Nearly all the people are in motion, yet every figure and every feature is sharp and distinct. A camera that can make such a picture must prove invaluable to amateurs who do outdoor work.

Here is a letter that tells what Professor Bickmore thinks of the Reflex:

American Museum of Natural History,
New York, November 17th, 1899.

Dear Sir:—We are gratified with the excellence of your negatives of animals, made in the new Zoological Garden, that we wish you would go to Washington and Philadelphia and secure views of the various mammals and birds, which you have not already made and delivered to us. We also suggest that in filling this order you make use of the same Reflex camera with which you made the negatives which please us so highly.

Truly yours,

Albert S. Bickmore.

Send for a copy of the Reflex catalogue and then if you do not agree with me as to its beauty and its value, write and tell me so. Mention RECREATION when writing the company.

Charles S. Fee, G. P. A. of the Northern Pacific Railway, prints in April RECREATION a full page ad, which every amateur photographer in the land should read. It shows a bit of Yellowstone National Park scenery, presumably a section of the Yel-

lowstone river, with a few elk, a buffalo and a grizzly roaming about the banks. One of the park stages has halted on the roadway, and 2 passengers, a pretty girl and another fellow, have hopped out and are taking snap shots at the game.

And this leads me to remark that the Yellowstone Park offers the best opportunities to be found anywhere on the Continent for photographing live wild animals. There are hundreds of bears, thousands of elk and plenty of deer, antelope and mountain sheep there, and they have become so accustomed to the sight of human beings that they are no longer so wild as they formerly were. It is an easy matter to approach them within camera range. A good photograph of one of these creatures is worth more, as a work of art, than 100 pictures of scenery, or of dead game, or of camps, or any of the various things that many amateurs work on.

The Western Gas Engine Company, Mishawaka, Ind., has put out another of the beautiful catalogues that are making this year of 1900 memorable. This book contains 5 full page reproductions of photographs in colors that are perfect dreams. Not the kind of dreams a man has after eating lobster salad or welsh rabbits, but the kind he has after having paid all his debts. Furthermore, these pictures deal largely with nature—with the beautiful lakes in Northern Indiana—and those appeal with special force to sportsmen.

Then this book also has an important business side to it. It describes in detail a line of motor launches made by this company, under the general name of RECREATION Launches. These are made in various lengths, from 16 feet up, and with carrying capacities from 6 people to almost any number you care to invite. The workmanship and materials used are all up to blue print, and if you think of buying a launch you should have a copy of this book. In writing for it please mention RECREATION.

Three years ago, while I was superintendent of the Metal Back Album Company, you sent several specimen copies of RECREATION to that company and they fell into my hands. I was much interested in them, and passed them on to the most noted sportsman in the factory, Charley Yeo. He also became interested and organized a club, securing a camera as his first premium. Since that he tells me he has organized several clubs. One of his first subscribers, Mr. Russell, also started

a club, securing a camera. One of his subscribers in turn, Robert Weir, secured a gun as a premium for a club started by him. In fact, I started what seemed to be an endless chain for securing subscribers to your magazine, and the enthusiasm shown by these people is what led me to select your magazine for advertising purposes.

Mngr. Buechner Mfg. Co., Battle Creek, Mich.

The Lionel Electric Flash Light, advertised on page xlv of this issue of RECREATION and illustrated herein, is an instrument that every photographer—amateur or professional—should have. It consists simply of a tube $1\frac{1}{2}$ inches in diameter and 7 inches long, in which a dry battery cartridge is inserted, and the entire

outfit weighs only 10 ounces. An explosive cap is placed in the tray which holds the flash powder. On pressing a button in the receiver this cap is exploded by an electric spark and the flash powder ignited. The apparatus should be held high above the head at the time of explosion, and thus the subject to be photographed is evenly and beautifully illuminated. A single cartridge, costing 30 cents, will give good service for 3 months, so that the cost of maintaining the outfit is merely nominal.

The Lionel Light is made by James S. Barron & Co., 24 Hudson street, New York city. You can get a circular giving full description of this lamp, by asking for it and mentioning RECREATION.

William Shakespeare, Jr., Kalamazoo, Mich., has put out a beautiful book descriptive of his reels. It is printed in colors and is bound in a weird combination of papers and gold seals that tempts one to forget all about reading the story; but after examining the cover for a time, you are sure to inquire within. There you find a tempting array of facts, figures and pictures, which cannot fail to instruct and interest you. Send for the book, and when you get it, you will thank me for having told you about it. Therefore, please mention RECREATION when writing.

The Racine Boat Manufacturing Co., Racine, Wis., has recently booked an order for an aluminum racing sail yacht for W.

H. Meyer, of Milwaukee. This is to be the first boat of this type built in the West and great things are predicted for it in the matter of speed. It is understood the yacht will be built on the latest and best lines known to science, and that it will be finished and equipped in a thoroughly artistic and tasteful manner. Yachtsmen will await the coming and going of this new craft with deep interest.

Mr. H. C. Townsend, G. P. A. of the M. P. Railway, St. Louis, has issued a book of picturesque views along the line of that system in Missouri, Kansas and Arkansas. The plates are 8x10 inches, printed on heavy, wood cut paper 10x14. Many of them are gems of photography and are well worth framing. It would pay any lover of photography to write for a copy of this book, and inasmuch as it is distributed gratuitously among the readers of RECREATION.

At the Sportsmen's Exposition Tournament, Peters' cartridges were used in 14 out of the 15 prize winners in the Championship event. The 15th man used Peters' cartridges part of the time, and King's Semi-Smokeless powder all the time. This makes a clean sweep for Semi-Smokeless powder, and 14 out of 15 for Peters' cartridges. Mr. Fred. C. Ross used Peters' cartridges in making his wonderful record of 2429 out of a possible 2500.

Parker Bros., Meriden, Conn., have issued a very handsome little catalogue of their guns. It is so small and compact that you can carry it in your inside pocket; yet it contains beautifully engraved cuts of all their leading guns, listing at \$50 to \$400 each. If you have any idea of buying a gun it would be well to write for a copy of this book, and say you saw it mentioned in RECREATION.

Navesink National Bank,

Red Bank, N. J., Dec. 11, 1899.

Messrs. Grey & Barger:

Gentlemen—I have given your Sight a thorough test, and find it all you claim for it. The novice will find it an invaluable aid, and the old-timer will find it a great help also, in finding his bird quickly and seeing it clearly at all times. Yours truly,

E. L. Cowart, Cashier.

H. H. Kiffe & Co., 523 Broadway, New York, have in press their 1900 catalogue. It will be issued within a few days, and will be mailed free to anyone who may ask for it and mention this notice.



PURE WHISKEY

*Direct from Distiller
To . . . Consumer*

FOUR FULL QUARTS
for \$ 3.20

EXPRESS PREPAID By US
SAVES MIDDLEMENS PROFITS
PREVENTS ADULTERATION

Since 1866

Hayner's pure double copper distilled Rye Whiskey has been sold to Consumers direct from our own Distillery, known as "Hayner's Registered Distillery No. 2, Tenth District, Ohio." No other Distillers sell to consumers direct. Those who offer to sell you whiskey in this way are speculators who buy to sell again, on which plan they are compelled to add a profit, which you can save by buying from us direct.

We will send four full quarts of Hayner's Seven-Year-Old Double Copper Distilled Rye Whiskey for \$3.20, express prepaid. We ship on approval in plain, sealed boxes, with no marks to indicate contents. When you receive and test it, if not satisfactory return it at our expense and we will return your \$3.20.

Such whiskey as we offer you for \$3.20 cannot be purchased elsewhere for less than \$5.00, and the low price at which we offer it saves you the addition of middlemen's profits, besides you are guaranteed the certainty of **pure** whiskey, absolutely free from adulteration.

REFERENCES.—Third National Bank, Dayton; State National Bank, St. Louis, or any of the Express Companies.

WRITE NEAREST ADDRESS

THE HAYNER DISTILLING CO.,

226-232 West Fifth Street, DAYTON, O. 305-307 S. Seventh St., ST. LOUIS, MO.

N.B.—Orders from Ariz., Col., Cal., Idaho, Mont., Nev., N. Mex., Ore., Utah, Wash., Wyo., must call for 20 qts. by freight, prepaid.

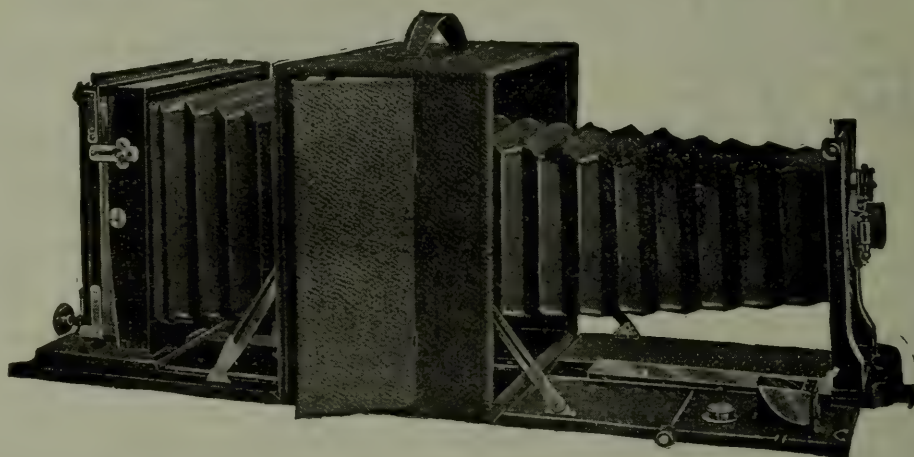
I guarantee the above firm to do, as it agrees.—EDITOR.

In the Long Focus Wide Angle

WIZARD

is offered an instrument adapted for

Hand Camera Purposes, Viewing, Wide Angle and
Telephoto Work, Copying and Enlarging.



The **L. F. W. A. WIZARD**, is a reversible back instrument, equipped with every adjustment ever put in any box, and combining this mechanical completeness with absolute rigidity of construction, and a luxurious finish to every component part.

Do You Contemplate Providing Yourself with the Best Obtainable?

In our Long Focus instruments is assembled the cream of all materials used in camera construction, by the most expert workmen to be had.

The **Optical Equipment** consists of two lenses, the **Extra Rapid Rectilinear** and our **Telephoto**, giving Four Different Focal Lengths.

If these facts appeal to you, kindly favor us with an inquiry for our catalogue. Mention **RECREATION**.

We are anxious to tell you, about our **Seven Series of Lenses** and our **Twenty-Seven Styles of Cameras**, ranging in price from \$5.00 to \$80.00.

A postal card from you will be appreciated, and will bring whatever information you may desire.

Manhattan Optical Co. of N. Y.

CRESSKILL, N. J.

AMATEUR PHOTOGRAPHY.

"A Bird on the plate is worth 2 in the Bag."

AND NOW COMES THE 5TH COMPETITION.

RECREATION has conducted 4 amateur photographic competitions, all of which have been eminently successful. A fifth will be held, which, it is believed, will be far more fruitful than any of the others. It will open April 1st, 1900, and close September 30th, 1900.

List of prizes to be announced later.

Subjects are limited to wild animals, birds, fishes, camp scenes, and to figures or groups of persons, or other animals, representing, in a truthful manner, shooting, fishing, amateur photography, bicycling, sailing, or other form of outdoor or indoor sport or recreation. Awards to be made by 3 judges none of whom shall be competitors.

Conditions: Contestants must submit 2 mounted prints, either silver, bromide, platinum or carbon, of each subject, which, as well as the negative, shall become the property of RECREATION. The name and address of the sender and title of picture to be plainly written on back of each print. Daylight, flashlight or electric light pictures admissible. Prize winning photographs to be published in RECREATION, full credit being given in all cases.

Any number of subjects may be submitted.

Pictures that may have been published elsewhere, or that may have been entered in any other competition, not available. No entry fee charged.

Don't let people who pose for you look at the camera. Occupy them in some other way. Many otherwise fine pictures have failed to win in the former competitions because the makers did not heed this warning.

PLEASURE AND PROFIT IN LANTERN SLIDES.

H. G. B.

As the winter approaches and interest in lanterns and slides is revived it has occurred to me that a few notes of my own experience in this fascinating branch of photographic art may not prove unacceptable to some of your readers. Although I have interested myself in photography for about 12 years, it was within the last 3 years that I turned my attention to the making, coloring and exhibiting of lantern slides. It has always been my aim to make the pastime pay for itself. I do not think a man with limited income and a home to keep going is justified in spending money on expensive hobbies without any thought of getting some of his money back again. It must be admitted there is not much chance of doing this in straight photography, but if you take up lantern slide making you may be able to compete with the best professional and not be afraid

of the results. I have heard the opinion sometimes expressed that a photograph colored is a photograph spoiled, but I never could see the force of it myself. Everything we see around us is colored, and I never heard any one suggest that the aspect of a landscape could be improved by looking at it through blue spectacles. Therefore, I hold that a man can not consider himself a full fledged slide maker if he is not able to successfully apply the color when occasion requires. An eye for color effect is, of course, essential, but the fact that a person can not paint a picture on paper or canvas need not deter him from making the attempt at coloring transparencies. Many failures, no doubt, may be traced to the lack of proper information as to the colors to be used. My first attempts were made with English photo stains. I found them good, and still use some of them occasionally, except the blue, which proved utterly useless, and as that is so largely used in skies, etc., I had to look around for something else. My next investment was a box of aniline dye colors specially prepared for lantern slide painting, and which may be bought from any well equipped stock store. I found those excellent, and the blue works just as well as the other colors. Some people say they are fugitive colors, but you will not find much of that nature about them if your brush slips and leaves a dab of color where you do not want it; and that is one of the objections to their use. After you have attained a moderate degree of proficiency in coloring, which need not take a long time if you have the requisite perception of color values, you might get some of your slides sandwiched in with others at a lantern evening of your local camera club without necessarily disclosing your own identity, quietly listen to the criticisms offered, and thus be able to see your work as others see it. If you successfully pass this ordeal, you may be tempted to call on a few of the photo supply houses or stereopticon outfitters in your city and let them know you are able and willing to undertake the coloring of slides for a proper remuneration. Equipped with the colors already mentioned, you might get along all right provided nothing but the ordinary gelatine lantern slides were offered to you, but somebody comes along with a set of trade slides. Take them apart and you will find they are made on a thin collodion film and then coated with a liberal dose of varnish, on which your photo stains or aniline dyes will act like water on the proverbial duck's back; they are simply useless. True, you may be able to remove some of the varnish by washing and

vigorous rubbing, but there is great danger of taking the film off with the varnish. Sometimes the varnish may have been omitted, but even then I find the collodion film so fragile they will not stand repeated applications of any color which has to be diluted with water. What you need then is the oil colors which are finely ground for lantern slide painting. They come in small tubes with a bottle of special varnish, and are cheaper in the long run than any other coloring material. One disadvantage these have as compared with the colors previously mentioned is the tendency to show the marks of the brush, but that can be overcome by dabbing either with the tip of the finger or with a small dabber made with a piece of old kid glove stretched over a little ball of cotton wool. There are good and bad points about each of the different coloring outfits mentioned, but if you want to get the best results with your slides you would better get them all and use as occasion requires.

The skillful slide maker always wants to own a good lantern, and here again, if you invest in one, you need not despair of seeing your money back and more if you go about it in the right way. Watch for a man who has been persuaded that "an easy and lucrative occupation is the giving of stereopticon entertainments through the small towns and villages of your State," and after he has tried it for a month or 2 you can usually buy his outfit at a comparatively low figure. You need not go to the expense of a double lantern, either, unless you are using vision pictures, which, of course, can not be produced without one. If you have a single lantern, don't use a panorama carrier, which shows one view sliding on and another one sliding off the screen at the same time. That is altogether too crude. There are several different carriers to be obtained now which change the pictures just about as neatly as dissolving with a double lantern. My own experience has been that the majority of people in an average audience neither know nor care how the slides are projected or changed provided it is done in a manner which does not offend the eye. They could not tell after an entertainment is over whether a single or double lantern was used, but what they will remember is whether your pictures were worth looking at or not. And now suppose you have learned to make color slides and have become the proud possessor of a good lantern. The next thing is how to turn it to profitable account. I presume you are connected more or less with some church. If not, you ought to be. Let them know you are willing to furnish a gratuitous exhibition for the benefit of the

Sunday school library or some equally deserving object. Call it an evening of "Illustrated Song and Story." You will find plenty of talent around the church to furnish the necessary singers, readers and reciters. You will have to buy or hire the slides for songs and stories, but interspersed with those you can exhibit a number of slides of your own make, copies of famous paintings, cats, kittens, dogs, etc., and last, but by no means least, a good collection of local views. These, more particularly if well colored, never fail to arouse the enthusiasm of your audience. Do not give a haphazard show, with a slide turned upside down occasionally by way of variety. There are too many people doing that kind of thing already. Prepare your programme as carefully and carry it out as faithfully as if you were getting \$25 for the engagement, because this is your advertisement. If you make this a success people will talk about it to their friends, and you will have no difficulty in securing engagements elsewhere, for which you will be paid. Be sure you have a good light. Better stick to the old, reliable oxy-hydrogen lime light than be worried with either saturators or acetylene gas. Use a long focus lens. If you have some one on the platform to give a brief description of the views that require it your best place with the lantern is right at the back of the hall, but if you have to do this talking yourself you would better be about two-thirds the length of the room from the screen. Don't have an assistant. Two men at a lantern, one feeding slides in and the other taking them out, looks too ridiculous. As to the slides illustrating songs and stories which I said above you would have to buy or hire, there again is scope for your ingenuity if you care to exercise it. Get a good standard song, for instance; not a ditty of the day which will be worn out in a month. Study the various points, hunt up your models, and see if you can not do as well as some of the illustrators whose work is offered for sale. If you buy the slides you would better get them plain. Good colored slides are expensive, and you ought to be able to do better painting yourself than you will get on the cheap sets.

The above advice is based on my own actual experience. Naturally, I am not anxious to invite competition in the city in which I live, but there seems to me no reason why the success which has attended my efforts here could not be duplicated by an enterprising amateur in the large cities of this or any other State.

DEVELOPING PAPERS.

G. A. CONRAD.

During the past 3 months I have been shown a large number of photographs made on developing papers of various

brands, and they do not come up to my expectations nor to results I have obtained. I am not stuck on myself, but am on the the paper I use, namely, Vinco, in carbon matt. Amateurs, as a rule, do not realize that good negatives are required to make good prints. They are inclined to think any old negative should yield a good print; but such is not the case, as they will find out sooner or later. Except for portraits, which I consider above the average amateur unless he be equipped with both special appliances and special skill, I consider carbon matt Vinco the simplest developing paper on the market for amateurs and the one that will give the best results.

In working Vinco paper, do not use daylight. Be content with an oil lamp, with a small wick, which does not give a great heat-producing flame. A small 25-cent lamp, with $\frac{5}{8}$ or $\frac{7}{8}$ inch wick, is sufficient. Expose about 8 inches from the lamp, turning the frame during exposure, to insure even exposure, using only a small piece to test by. When the correct exposure has been ascertained full size sheets may be used. The developer should be fresh and strong. I use a metol-hydro with bromide of potassium. Too much bromide or over exposure is certain to give olive green prints. One advantage which Vinco has over all other developing papers is the alum and salt short stop which stops development instantly. Where some portions of the print develop more rapidly than others, the short stop may be applied with the finger, arresting development at any particular place or stage and allowing the other portions to develop fully. Negatives will often yield better prints by a little manipulation of that kind. Take, for instance, a view of a park when the trees are in full foliage. Unless correctly exposed and developed parts of the negative will show almost clear glass while other portions will be dense. Such a negative should be "masked," but not many amateurs take time to do this, thinking it too much trouble. Such is not the case. I have a negative of a small stream, with the trees on either side leaning toward the stream and forming an arch so dense that sunlight cannot penetrate. I made an exposure and even with careful development, of over an hour, the result was not perfect. The print, however, is all that can be desired. I merely used a piece of cardboard, larger than the frame, with a hole roughly torn out, and gave the whole plate 5 seconds exposure. Don't cut smooth edges in masks. Then I placed the mask before the frame, keeping it in constant motion just in front of the dense portions. They required 55 seconds more exposure than the other parts. I have a print which

is a gem. Try it and don't think it can't be done. If your first trial does not yield a perfect print try again. I made 8 or 10 prints before I had the proper exposure.

About 75 per cent. of exposures are too short. The development of most negatives is what ruins them. Amateurs, as a rule, force development. They are anxious to "see what it looks like." I recently developed a roll of film, 12 snaps, which took me over 3 hours. I used a fresh diluted developer, weak in alkali, pouring it away and making up a fresh lot as the one being used became exhausted. Result, 10 good negatives. A few evenings later I called on another friend who said I was just in time to see him rush a dozen films through. He did rush them; using a developer strong in alkali. The results were accordingly. The next time you go out give, instead of 8f 1-25 or, worse yet, 1-100, longer exposures, using a small enough stop to give a sharp image. Develop slowly, and you will be surprised at the difference.

A 4x5 lens should have not less than an 8-inch focus. Don't try to get $\frac{4}{3}$ of the universe on one plate. Be satisfied with a small bit, which may be selected from any large landscape. Do not take snow scenes except early or late in the day. You can then obtain long shadows instead of chalky and sooty effects.

TRANSPARENCIES FOR ENLARGED NEGATIVES.

When making transparencies for enlarged negatives, says Harold Baker, in *Photographic Scraps*, the means employed must depend on the density of the original negative. When it is of good density a carbon transparency is usually made, but the negative may perhaps be too dense or too thin to give a good carbon transparency, and, besides, many people do not care to buy sensitive tissue for enlarging one or 2 negatives. It is possible, of course, to sensitize the tissue so as to make it suitable for negatives of almost any density; but few photographers, except those who use large quantities, will go to the trouble of sensitizing their own tissue, and prefer to fall back on ordinary dry plates, or perhaps lantern plates. As there is such a large choice as regards speed and power of giving density, this plan is a good and convenient one. It is possible to entirely alter the character of the large negative, as compared with the original, by a judicious choice of plate. This latitude is so great that it is possible, by using a quick plate, to produce a transparency by contact that will give a broad, soft, diffused effect, in the large negative, from an original that was hard and chalky. And on the other hand

it is possible to make a brilliant, large negative from a small one, sharply focused, but thin or misty from over exposure or smoky atmosphere, by using a process plate. I have recently had such a case, in which the original was so hazy from smoke, although of good density, that a brilliant print, either in silver or bromide, could not be made from it. There was no possibility of securing a better negative on a clearer day, as the photograph was a record of building operations on a certain date, and it was necessary to get a large brilliant print from it, such as the contractor loves. A transparency was first made on an ordinary plate, but the large negative was not so clear as was necessary. Another transparency was made on a process plate by exposing it by contact for 15 seconds to a 16-candle incandescent electric lamp, about the same power as a good gas flame, and developing to considerable density. By reducing the weak ferricyanide and hypo a clear, bright transparency was obtained, in which the distant details were clear and distinct; the large negative was then made, giving a silver print which showed no signs of having been taken from an enlarged negative. It might have been from a direct negative. This was no doubt due to the absence of grain in the transparency, as the deposit of silver in the process plate is extremely fine in grain. When working from a thin negative a special lantern plate may be used, from a negative of fair average density an ordinary plate will give a good result, and for a very dense one a quick plate is best.

HOME-MADE ENLARGING AND REDUCING APPARATUS.

Many amateurs desire to enlarge small negatives, but do not care to buy an expensive camera for that purpose. An apparatus which will answer as well can be made at home and will cost but a few cents and a few hours of time.

Procure 2 starch boxes with slide lids, and a smaller box just fitting easily inside the starch boxes. Cut a square hole in the end of one of the larger boxes and cleat it inside and around edges of opening. This will serve to hold your negative; make it 4x5 inches, and make some pasteboard frames or kits for small negatives. Cut a round opening large enough to admit your lens tube.

Then take the second starch box and cut an opening in which to fasten your lens tube by the collar. In the opposite end cut a large opening, or take out that end of the box. Next, cut a large opening in one end of the small box, and so arrange the other end, by cutting and fitting, that you can readily adjust your plate-holder and a ground glass frame. Black

all inside work with shellac varnish and lamp black. Place your negative in opening in front of box No. 1, ground glass in front, and about one inch from it.

Fasten box No. 2 on a long board, say 4 feet long and 12 inches wide. Place box No. 1 in position so that your lens will come opposite opening in rear of box 2. Rim the boxes together and fasten cleats or strips of wood along to keep boxes in position. Fasten box No. 2 to the board; but not No. 1. Let it be free to move toward or from your lens tube. Now place box No. 3 in box No. 2 and focus by moving the small box in and out and also by separating the larger boxes, as may be needed, to get size of picture on glass. Focus firmly by the small box holding ground glass. You can hold the larger boxes in position by a cleat and screw on top, and the small box by a screw or thumb screw through side of box No. 2, and tighten it up when focus is just right.

John Huffnagle, Belmar, N. J.

QUICK STOPS.

There are times in the affairs of photographers, says an exchange, when the unexpected happens, when plates develop, or prints tone, with a rapidity which puzzles the will, and the "rosy darkness" of the photographer's den is stiff with—let us say, unofficial expressions. At such crises it is useful to have at hand the right "quick stop," so here are a few.

Plunged into the solution prescribed below the print or plate is checked in its mad career, though, let it be said, these solutions find a use, not in such red hot photography only, but in the leisurely practice of the art as well. There is a satisfaction in dumping one's prints into a solution which one knows will arrest all toning action, and allow one, without further bothering about them, to finish off the whole batch. But to details:

Developer (pyro, hydroquinone, etc.)—

Citric acid 5 grains.

Water 1 ounce.

Toning (gold and sulphocyanide, etc.)—

Sulphite of soda 5 grains.

Water 1 ounce.

Toning (platinum and citric acid)—

Carbonate of soda (crystal.) ..10 grains.

Water 1 ounce.

Developing P. O. P.—

Acetic acid 1 drop.

Water 1 ounce.

Uranium Intensifier.—Immerse in a large dish of still water.

Persulphate Reducer.—Ten per cent. solution of sodium sulphite.

Farmer's Reducer.—Plenty of water.

This last recipe is, indeed, of almost universal application. A plentiful supply

of water from a tap or a rose jet sweeps out the chemicals from the gelatine completely enough to slow down their action, when the chemical "quick stop" may be applied. Uranium toned prints, let it be noted in conclusion, must be treated gently in still water. A stream from a jet or tap is likely to cause light patches.—The Professional Photographer.

WARM TONED PLATINUM PRINTS.

Cold developed platinum prints immersed in a bath of uranium nitrate assume a brownish violet tint, but do not go beyond that color, and never change to red, even by a prolonged action of the bath.

Provided always that the development of the print has been by the cold bath process, a reddish (röthel) color is obtainable by the following process:

Add to 1 liter (34½ ounces) of the developer from 100 to 200 c. cm. (3½ to 7 ounces) of a 4 per cent. solution of mercuric chloride. Less mercury produces browns of lesser intensity, while with more this intensity of color increases.

If, after developing, fixing and washing the print is immersed in the uranium bath—Water, 1 liter (34½ ounces); uranium nitrate, 10 grammes (2½ drachms); ferricyanate of potassium, 2 grammes (1½ drachms); glacial acetic acid, 60 grammes (2 ounces)—the tone changes gradually to a fine sepia color, becomes reddish by a continued action, and finally turns to a positive red.

When the desired tone is attained, wash for 10 minutes in pure water, acidified with glacial acetic acid, and finally rinse off.

Prolonged washing will either injure or reduce the tone.

Washing the prints in a dilute solution of ferric chloride turns them green. In order to eliminate from the print all excess of iron, wash in water acidulated with hydrochloric or acetic acid.

Continued washing of a green print in water tends to reduce its color intensity, which can, however, be restored by again treating it with a solution of ferric chloride.—Photographische Correspondenzen.

BURNISHING WITHOUT A BURNISHER.

Few amateur photographers possess a burnisher, but all may have pictures equal in finish to the work of the expensive burnisher. Most of you are, probably, more or less familiar with the squeegee method of finishing unmounted prints, but perhaps not all are aware that mounted photos can be secured by a very similar process, having the same gloss and an added charm of absolute flatness. When the prints are squeegeed previous to being mounted they lose much of their fine finish in mounting.

For squeegeeing after mounting, the

prints should be mounted while quite wet, and great care taken not to use too much paste. The ordinary roller is not sufficient to secure the perfect contact necessary for the glaze finish; so the print and the ferro-type plate must, in some manner, be subjected to greater pressure. To obtain this, put the prints, one at a time, and each with piece of ferro-plate, in a letter press. Great pressure is thereby secured, and mounted photos so treated will dry as quickly and have as fine a gloss as unmounted prints or pictures which have been sent to the professional for burnishing. Perhaps for small pictures it would be better to put several at a time on an entire plate than to cut it, but with my size (5x8) I have better success with one print at a time on half a ferro-plate. In this, as in all other operations photographic, "Practice makes perfect."—Exchange.

REDUCING DENSITY.

It often happens that portions of a negative are so intense no detail can be secured from them in the printing. Once in a while, also, a negative is left too long in the developer and acquires too much density throughout. In the first case, local reduction must be resorted to, while in the other, reduction of the entire image will be necessary. This is a simple process, and, once tried, will be freely used thereafter. It would be a great improvement to any negative to over develop it and then reduce to proper density, as it clears the shadows, removes fog and makes the best possible printing negative.

For local reduction apply carefully with a brush; for complete reduction simply immerse the plate until sufficiently reduced, then wash well.

The mixed solution is to be thrown away after use, as it does not keep well.

I prefer Howard Farmer's reducer to any. It is prepared as follows:

A.

Potassium ferricyanide 1 oz.
Water 10 oz.

B.

Hypo-soda 4 oz.
Water 20 oz.

For use: Solution A, 60 mins; solution B, 4 oz.—Exchange.

SNAP SHOTS.

I have read your magazine from the first issue to the latest. I read all the sportsmen's journals, but none of them comes up to RECREATION, which is a world beater. I never could see anything in the pages devoted to photography until a month ago, when I caught a bad case of camera fever. I read Mrs. Porter's article on "How I Began to Take Pictures,"

and now I lay it all to her that I have become a camera fiend. Her advice is all right. After reading her articles, and every one of the back numbers of RECREATION. I bought a camera and started in. Have just used 3 dozen plates, and have some pictures I am proud of. My friends say I have done well, considering that I press the button and do the rest myself. I send you a picture of our cycle path; we have about 20 miles of just such dense shade.

Harry P., Seattle, Wash.

This picture is excellent.—EDITOR.

Will the following formula produce paper which is practically the same as the ferro-prussiate paper?

Compound of citrate of iron and ammonia, 1 ounce 7 drachms dissolved in 8 ounces of water.

Red prussiate of potash, 1 ounce 2 drachms, dissolved in 8 ounces of water.

Mix the 2 solutions in equal parts.

Wm. I. Brock, Ames, Ia.

ANSWER.

The formula is all right, and when brushed on good white paper will produce ferro-prussiate paper. Coat the paper quickly, brushing both ways to avoid streaks. Coat and dry in a dimly daylighted room or by gaslight. Don't make up more than $\frac{1}{8}$ the quantity, as the solutions do not keep well, and the mixed solution is only good when quickly used. Keep solutions in bottles wrapped in black paper.—EDITOR.

RECREATION'S Fifth Annual Photo Competition is now open, and Mr. Fee has consented to offer a round-trip ticket, St. Paul to Cinnabar and return, as a special prize for the best photograph of a live, wild animal or bird, made in the Yellowstone Park, and entered in this competition.

Therefore, if you are going to make a trip this summer go to the Park. Take your camera with you. There is no close season in the Park on camera hunters, and no licenses required to shoot with that kind of weapon.

Then, if you capture this special prize which Mr. Fee offers, you can go again next year, or send your best girl, or your mother, or your brother, or some other chum.

I lately learned an excellent method of making perfect prints from cracked negatives. Secure a board slightly larger than your printing frame and in each corner drive a tack. To each tack tie a string. Knot the strings together some distance above the board, attaching to them another and longer string. By this string suspend the apparatus in the sun, and lay the

loaded printing frame on the board. Then start the string to twisting by whirling the board, and it will do the rest. The light, striking the crack at all angles, does not reproduce it on the print.

H. L. Hill, Lake Mills, Ia.

Replying to A. G., Hartford, Conn., in May RECREATION: If the developer used is clear working, obtained by the addition of a small amount of bromide of potassium, the development is the same as usual. Good results in cloud photography can not be obtained without the use of an iso-chromatic or other color value plate. Cloud photographs on ordinary plates are poor; on ordinary plates with the use of a color screen the results are slightly better; while a combination of slow iso-plate and color screen gives the best results. The difference between the last 2 negatives, however, will be slight.

S. E. C., San Francisco, Cal.

In a recent lecture on the photographic work of the expedition made by Sir Martin Conway, "Crossing Spitzbergen," Mr. E. T. Garwood stated that the chief photographic difficulty was a lack of density in the negatives taken, doubtless owing to the long period elapsing between exposure and development. I have already remarked on the fading of the latent image in some makes of bromide papers where development was delayed. It would be interesting to know whether this defect is inherent in all sensitive photographic surfaces or is confined to certain makes.

Will you please publish a formula for making a transparent paste for mounting photos on glass paper weights? 2. What shade or color should a photograph be when toned in the platinum bath mentioned in November, 1898, RECREATION?

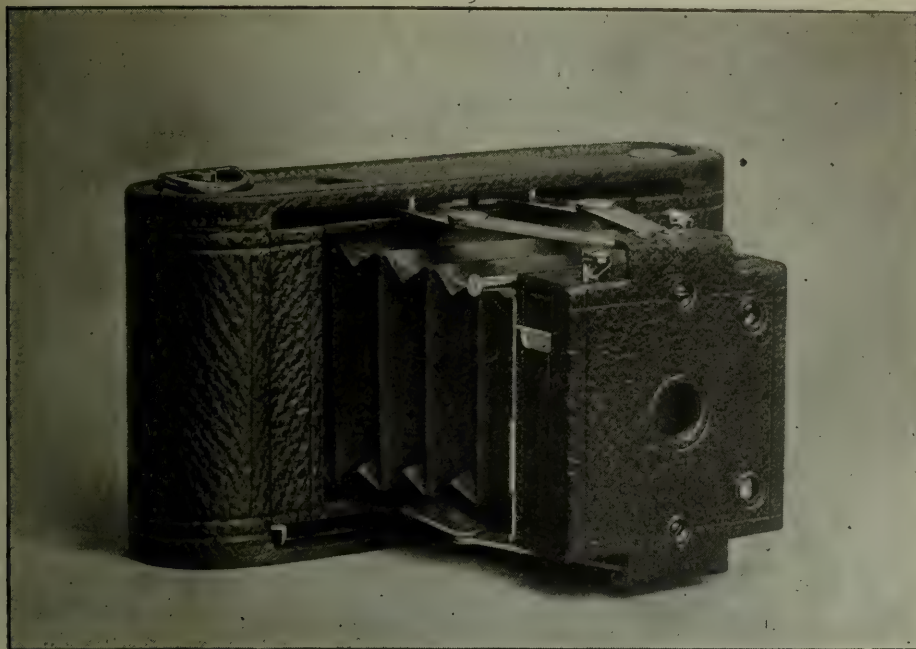
Lloyd O. Ingalls, West Durham, Me.

ANSWER.

1. Try good white shellac, quite thin. 2. From olive brown to olive black. With some papers pure jet blacks can be obtained.—EDITOR.

White draperies are apt to give in reproduction a too white and detailless result. A great improvement is to dye them slightly with an infusion of coffee. The idea is old, but it is one of those little things which the photographer of *genre* subjects will do well to bear in mind.

M. Massias, in several Continental contemporaries, mentions a simple method of preparing a print for the application of colors. Simply rub over the surface with a freshly cut slice of potato.



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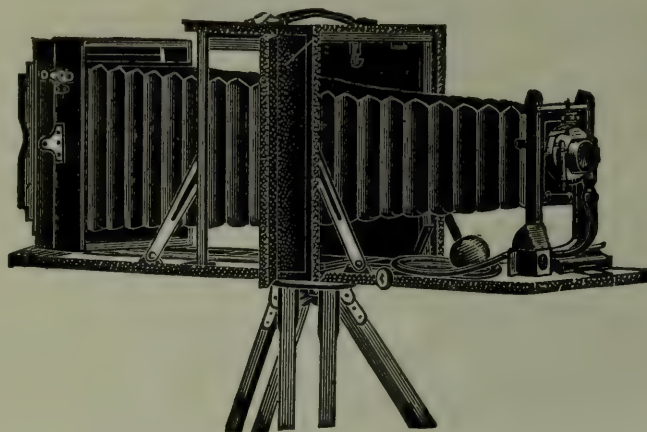
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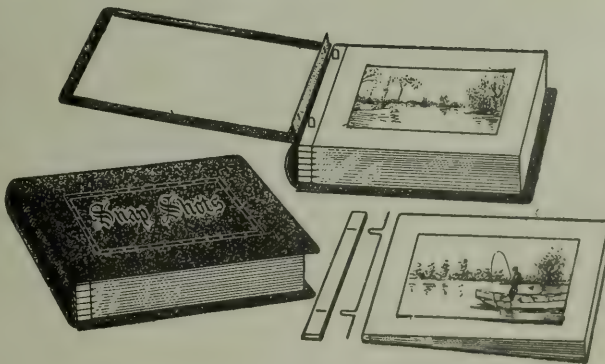
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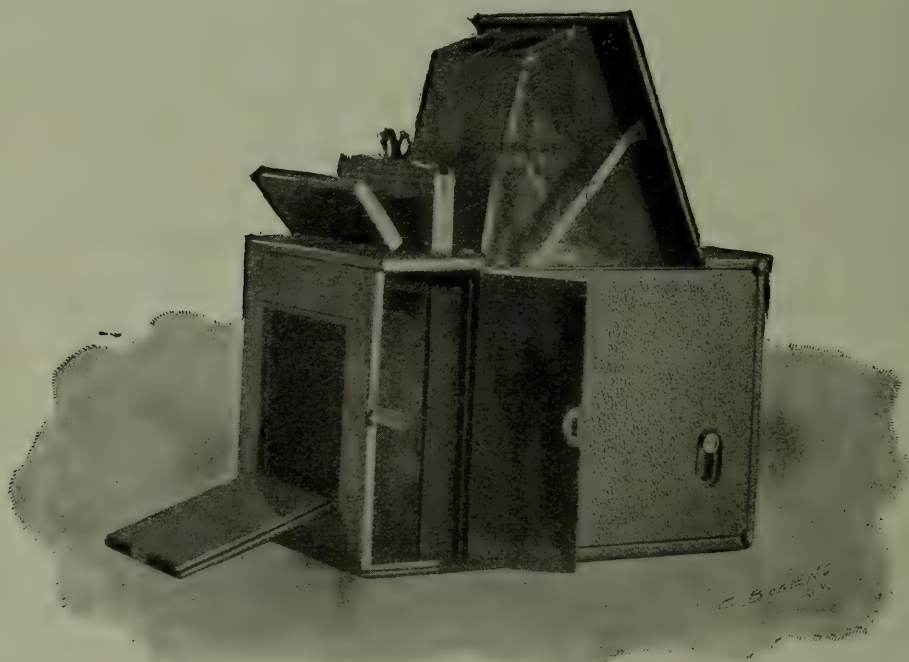


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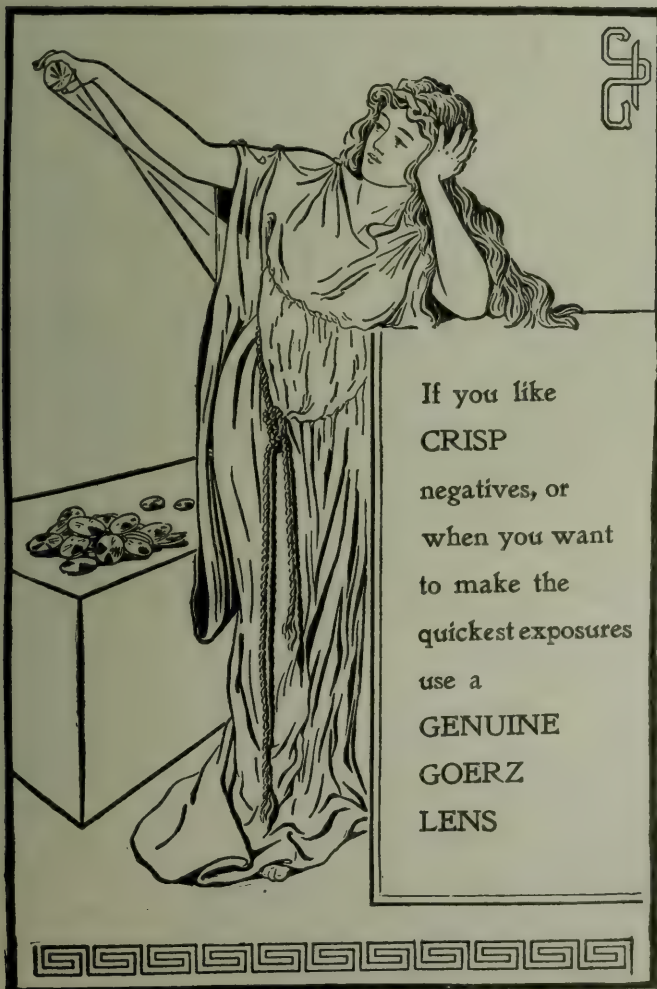
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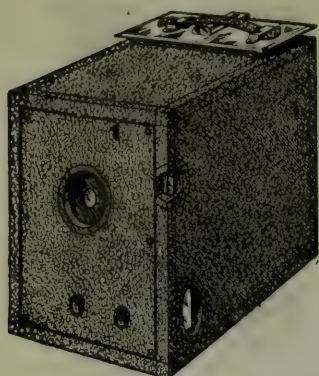
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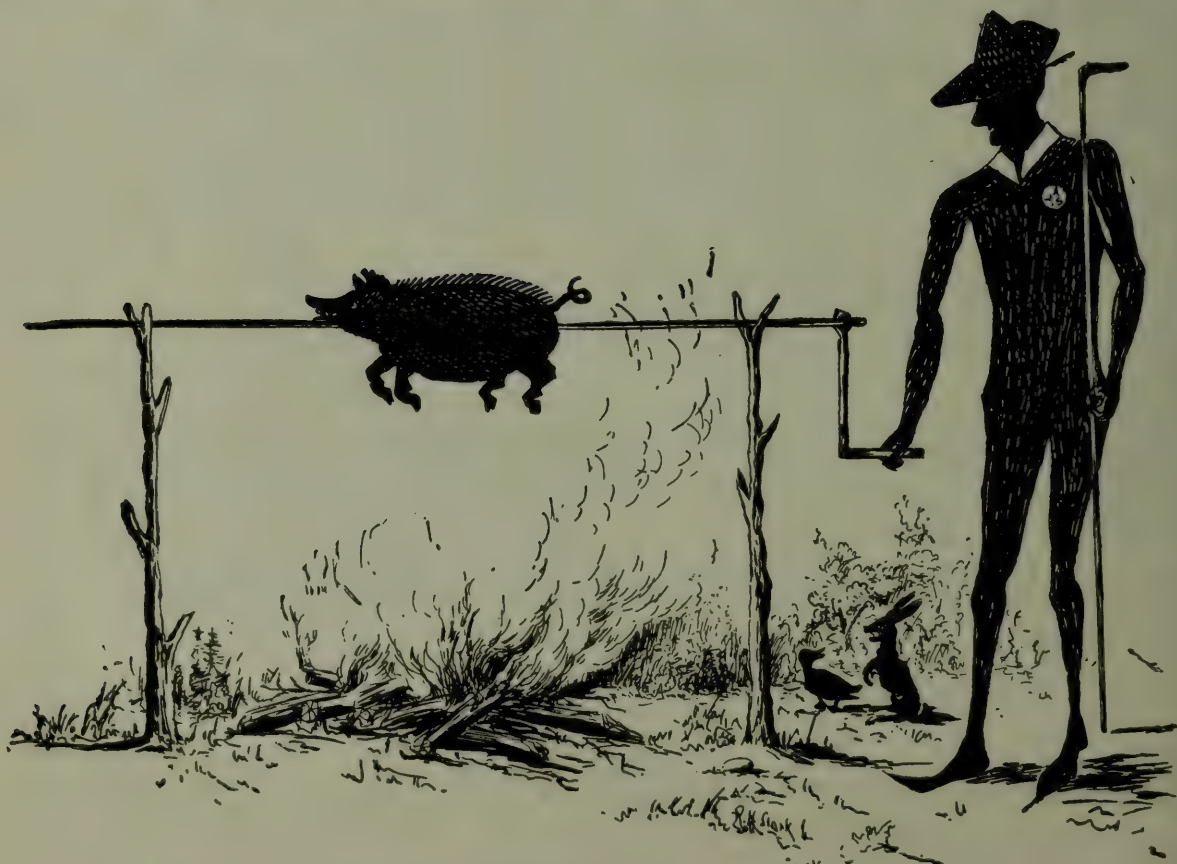


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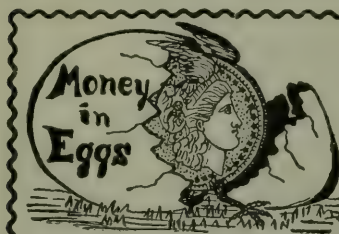
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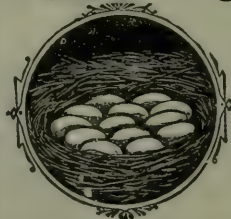
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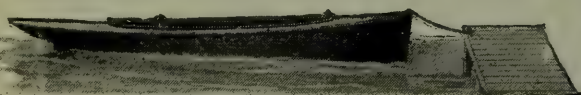
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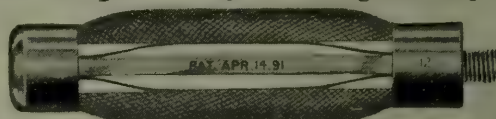


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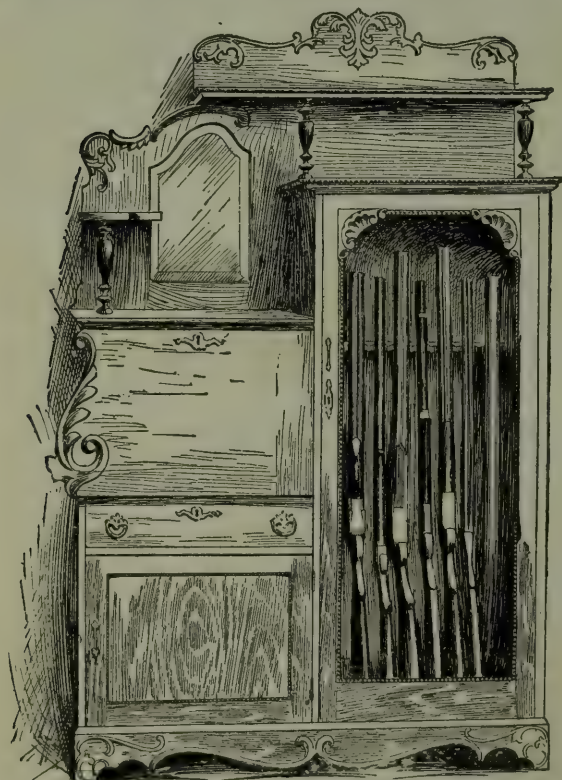
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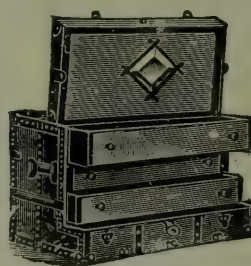
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For Sale: A fine silver tip grizzly rug. The skin was taken from a big fellow. Also another rug made from the skin of a yearling silver tip. Address

George B. McClellan, Red Bank, Wyoming.

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For 1900 judicious buyers of Baseball Supplies will select their goods from the **INGERSOLL LINE**. It is everybody's favorite, **our best being the best** though one-third lower than established prices, while our Popular Supplies are far better for the money than any other kind. Every baseball player, bicycle rider, in fact every sportsman should send for our Catalogue No. 19a of Spring and Summer Sports. Your name on a postal card will bring it and the penny will be well spent.

Uniforms. All our Uniforms are made from reliable material, correctly cut and durably tailored. Each uniform includes Shirt with eight letters, padded Pants with Cap, Hose and Belt to match. Made in appropriate colors and present a handsome appearance on the diamond.

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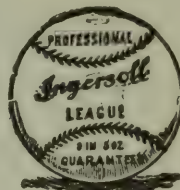
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"The Handiest Tool a Sportsman Ever Carried."

Large enough to fell a tree, and small enough to sharpen a lead pencil. Our new booklet, "The Story of an Axe," lots of interesting facts about the axe and its use, free for the asking. Made in two styles. : : : :

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No. 1—11 inches, 18 ounces, . . . \$2.50
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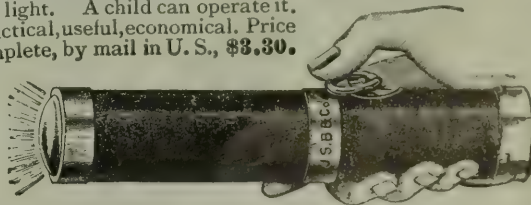
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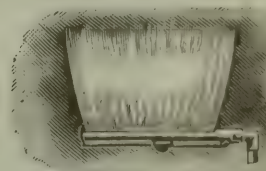
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PORTABLE, SUBSTANTIAL,

SIMPLE, NEAT.

Only 7 inches long when closed, weighs but 10 ounces, can be carried in pocket and made ready for use at a moment's notice. The flash powder is ignited by spark from battery inside the handle. Simply press the button when ready. Particulars Free.

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Made in 5 Sizes.

Is a Wickless Blue Flame Kerosene Oil Burning Stove. You start but one burner. After that is started you have a Gas Stove. It has no wicking of asbestos, or anything else to become oil-laden or charred. Should last a life time.

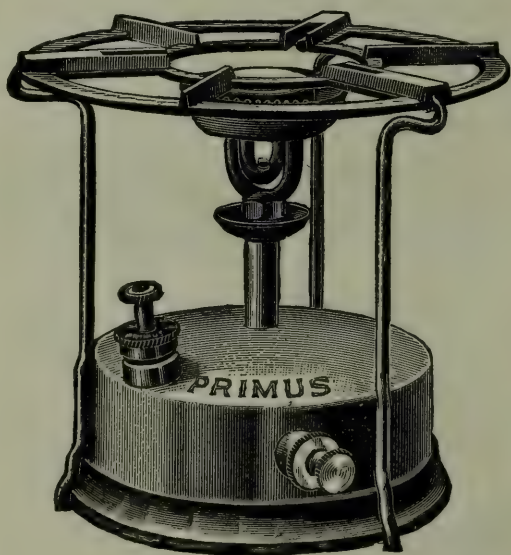
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It can be regulated absolutely and instantly, and left burning high or low—it can not creep up.



A SPORTSMAN'S STOVE

THE PRIMUS



This stove weighs 4 lbs., is of solid brass, with tinned iron standards. It is $8\frac{1}{4}$ inches high and $8\frac{3}{4}$ inches in diameter at the top. It will boil a quart of water in four minutes, or do a six-pound roast of meat to a turn in sixty.

No smoke or bad odor. It is a gas stove, producing its own gas from kerosene, yet is perfectly safe. Its cost for fuel is only one-half a cent an hour. A quart of oil will run it for five hours. Flame is perfectly regulated or instantly extinguished. The stove is handsome and should last a lifetime. It costs \$3.75

For use in kitchen, in camp, on yachts, or anywhere a compact, portable and good stove is needed.

Write and let us tell you more fully of its convenience and economy.

Manufactured by

The Primus Co.

197 FULTON ST., NEW YORK.

Tremendous Muscular Force, Endurance, Energy and Alertness

QUICKLY ACQUIRED BY THE USE OF THE

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"THE CLUB WITH LIFE IN IT"

Nothing ever used or conceived like it! Concealed weights and springs, plunging and bounding as it is swung, make the exercise like wrestling with a live thing. You CAN'T use it, like other exercises, in an indifferent, half-hearted way. It brings out all your muscle and mind. Gives robust health, magnificent development, grace and celerity of movement. The club is "a beautiful piece of work," aluminum, nickel and polished steel.

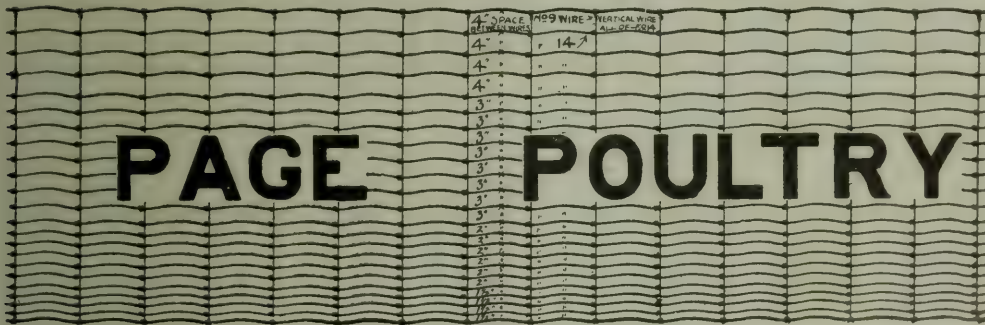
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58 INCHES HIGH

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Used extensively to enclose Poultry, Dogs, Hares,
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Bottom Meshes only one and one-half inches

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ADRIAN, MICH.

A RIDE TO CUSTER BATTLEFIELD.

All who have visited Custer Trail Ranch in the Bad Lands of the Little Missouri river, near Medora, North Dakota, are familiar with the country, ranch and range scenes.

Excursions are made yearly to some of the various Indian agencies located within 100 or 200 miles, or to the Yellowstone National Park.

In 1899 we made a camping trip across the Standing Rock Sioux reservation to Fort Yates and return, riding over 400 miles.

A week later 30 of the boys went by railroad to Cinnabar, Montana, where the horses, wagons, etc., had been sent. The tour of the Yellowstone Park was made camping, fishing and kodaking, with abundant time for seeing all the wonderful geysers, pools of hot or boiling water, colored like the rainbow, falls, cascades, etc.

We now propose starting about the middle of July, with necessary mess, and bed wagons, tents, bedding, horses, and, in fact, a full round-up outfit, keeping South of Yellowstone river, crossing O'Fallon creek, Powder, Tongue and Rosebud rivers, visiting the Cheyenne agency, and camping for a week on the Little Big Horn, at Custer Battlefield, and Crow agency.

This camping trip will be a grand one, going through the most famous Indian country in America, and viewing the scene of the last and greatest fight made by the united braves of the Sioux, Cheyenne and other powerful tribes.

The distance traveled will be 500 miles, and will take about one month.

If desired, arrangements will be made for all who wish to visit the Yellowstone Park, which is only a short distance from Custer Battlefield.

A fine baseball ground has been prepared at Custer Trail Ranch, clay pigeon traps are here, and everything will be done to give the boys a good time.

A fresh saddle horse, with cowboy saddle, trappings, etc., is furnished daily for each person.

All those expecting to be at the ranch this summer and take the Custer Battlefield trip, should write early and engage accommodations. Eaton Brothers,

Custer Trail Ranch, Medora, N. Dakota.

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We will do you good!
Will you let us?

THE CLINIC, Syracuse, N. Y.

A STARTER FOR SPRING.

A. R. N.

When spring with her birds and her
bright-colored blossoms
Comes blithely to cheer us once more
with her joy,
I hie me away to the brook and the wood-
land,
To share in their gladness which has no
alloy.

The shy brook trout are in need of pro-
tection
From vilest and lowest and meanest of
swine;
Well, I've now joined the League of
American Sportsmen,
And shall try with its tenets to keep
right in line.

Not only must fish be protected from
porkers,
But all game that's good in the true
sportsman's sight;
So we'll just keep the bristle-backs run-
ning and squealing,
Till they turn square about and declare
for the right.

If all the League members, whenever they
meet them
Will tell these low swine how they're
thought of by men,
It will make selfish hunters avoid taking
chances
Of bringing up short in Coquina's wide
pen.

Our president has his own methods of
branding
The game hogs he rounds up on moor-
land and lea;
And if, after treatment, the devil's still in
them,
He'll drive them all headlong down into
the sea.

Mistress (greatly distressed as Bridget
awkwardly drops the chicken on the floor
when about to put it on the table)—Dear
me! Now we've lost our dinner!

Bridget—Indade, ye've not. Oi have me
fut on it!—Tit-Bits.

Hardacre—Did that pianist imitate the
storm?

Crawfoot—Imitate it? Why, man, when
he began thumping out raindrops Mandy
whispered in my ear that we had forgotten
our umbrellas.—Chicago Daily News.

Keeper (with suppressed excitement and
evident relief—to Fitznoodle)—That's a
fine shot, sir!

Fitznoodle—How so? I didnt hit any-
thing!

Keeper—That's just it, sir. And the
dawg right in range, too!—Punch.

Special Sale of High
Grade Tackle

Our \$15 "MONARCH" grade of genuine
hand-made split bamboo Fly and Bait Rods
are celebrated throughout the United States.
Every rod is thoroughly warranted and many
of our customers have told us that they were
equal to the best rods they had ever seen.

Each rod is made by hand from carefully
selected bamboo with generous windings and
the highest quality of finish. The mount-
ings are of genuine German silver with finest
cork hand grips. They are made in several
lengths and weights.

Fly rods, 9 to 10 ft. 6 in. and from 4 to 7 oz.

Bait rods, 7 to 10 ft. and from 6 to 12 oz.

Each rod in a covered form and a sub-
stantial canvas case. Special price to RE-
CREATION readers, \$10.

A "FRANKFORT" reel of very fine quality
and light weight is offered this month at a
special price.

The greatest reel concern in Kentucky has
discovered an aluminum alloy that is at once
hard, unyielding, very tough and wonder-
fully light. It looks exactly like sterling sil-
ver and retains a beautiful finish. All the
heavy parts of the reel are made of this metal,
the bars, spool heads and balance handle
are made of German silver, the pinions are
of Stubbs' English steel rod and the gear cut
from drawn brass rod.

Each reel has click and drag and is quad-
ruple multiplying, the spool is $1\frac{1}{2}$ in. long
and has a 2 in. head and the reel holds 80
yards. With a little care it will last 20 years.
Special price, \$12.

"MOOSEHEAD" enameled waterproof line,
the finest line for the money in the world to-
day. Put up 25 yds. on a card, 4 connected.
Special price per card for size H, small, 40c;
size G, medium, 50c; size F, med. large, 60c.

The "NATCHAUG" celebrated waterproof
lines at a special price. This brand of water-
proof line is probably better known than any
in the market, and we have never before of-
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a card, 4 cards connected. Special price per
card, No. H, small, 30c; No. G, medium, 40c;
No. F, medium large, 50c.

LEADERS. Special price for this occasion.
Our extra quality tested "Hercules" leaders,
stained an invisible coffee color. Each leader
made with loops and put up on a card. Price
each, 1 yd. single, 10c; per doz., \$1; 2 yds.,
20c each; 1 yd. double, 20c each; 2 yds.
double, 40c each.

FLIES. Specially fine imported trout flies
in all the leading patterns. These are double
wing flies tied to our special order on bronzed
pennel hooks with helpers on special coffee-
colored gut and no such flies have ever been
offered in this country for the money. Put up
half a doz. of a kind on a card. Special price
per card, 30c.

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freely returned if the goods are not satisfactory
in every way.

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SOME GOOD GUIDES.

Following is a list of names and addresses of guides who have been recommended to me, by men who have employed them; together with data as to the species of game and fish which these guides undertake to find for sportsmen.

If anyone who may employ one of these guides should find him incompetent or unsatisfactory, I will be grateful if he will report the fact to me.

COLORADO.

W. H. Hubbard, Glenwood Springs, elk, bear, deer antelope, trout, and grouse.

J. M. Campbell, Buford, ditto

FLORIDA.

Carson Bros., Frostproof, Polk Co.

IDAHO.

W. L. Winegar, Egin, Fremont Co., elk, bear, deer, antelope, mountain sheep, trout and grouse.

Geo. Winegar, St. Anthony, Fremont Co., ditto

John Ching, Kilgore, Fremont Co., "

R. W. Rock, Lake, Fremont Co., "

Clay Vance, Houston, Custer Co., "

H. W. Johnson, Shoshone, "

J. B. Crapo, Kilgore, "

Chas. Pettys, " "

MAINE.

James A. Duff, Kineo, Moosehead Lake, moose, caribou, deer, grouse and trout.

I. O. Hunt, Norcross, ditto

MINNESOTA.

E. L. Brown, Warren, ducks, geese, prairie chickens, and black bass.

MONTANA.

James Blair, Lakeview, elk, bear, deer, antelope, mountain sheep, trout and grouse.

W. A. Hague, Fridley, ditto

Vic. Smith, Anaconda, "

M. P. Dunham, Woodworth, "

William Jackson, Browning, "

A. H. McManus, Superior, "

A. T. Leeds, Darby, "

NEW YORK.

E. W. Kinne, Mongaup Valley, White Lake, Sullivan Co., deer, grouse, rabbits, squirrels and trout.

Henry N. Mullin, Box 74, Harrisville, N. Y., deer grouse, rabbits, squirrels and trout.

NORTH CAROLINA.

Fred. Latham, Haslin, deer, quails, ducks, salt-water fishing.

F. S. Jarvis, Haslin, ditto

WYOMING.

Mark H. Warner, Ten Sleep, elk, bear, deer, mountain sheep, antelope, grouse and trout.

James L. Simpson, Jackson, ditto

Milo Burke, Ten Sleep, "

Nelson Yarnall, Dubois, "

S. A. Lawson, Laramie, "

Cecil J. Huntington, Dayton, "

J. L. Simpson, Jackson, "

Frank L. Peterson, Jackson, "

CANADA.

Dell Thomas, Lumby P. O., B. C., deer, bear, sheep, goats, grouse and trout.

Geo. E. Armstrong, Perth Centre, N. B., moose caribou, deer, grouse and trout.

Adam Moore, Scotch Lake, York Co., N. B., moose, caribou, deer, grouse and trout.

W. A. Brewster, Banff, Rocky Mountain Park, Can., bear, sheep, goats, grouse and trout.

NEWFOUNDLAND

Geo. Gillard, Little Bay, Notre Dame Bay, caribou, trout and salmon.

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It is an absolutely effective and permanent protection against the **Rusting, Pitting and Leading** of the bore of Firearms.

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References: Lieut. G. T. Emmons, U. S. Navy, Navy Dept., Washington, D. C.; Hon. Will D Jenkins, Sec. of State, Olympia, Wash.; G. O. Shields, Editor RECREATION.

Are you planning a hunting trip for next summer or fall? If so write me. I have a complete packing and camping outfit for several men, also an ample supply of horses, saddles, etc.

My ranch is in the foothills of the Big Horn Mountains, where elk, deer, bear and antelope may still be found in fair numbers. Also fine trout fishing. Rates reasonable.

References:

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Scenery on route from here to Park finest to be seen on any trip in the mountains.

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Their prices are as low as consistent with first-class services. Reference furnished on request. Correspondence solicited. For further particulars address the secretary.

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Claret wine from \$3.50 to \$10.00 per

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devoid of every trace of fusel oil, and
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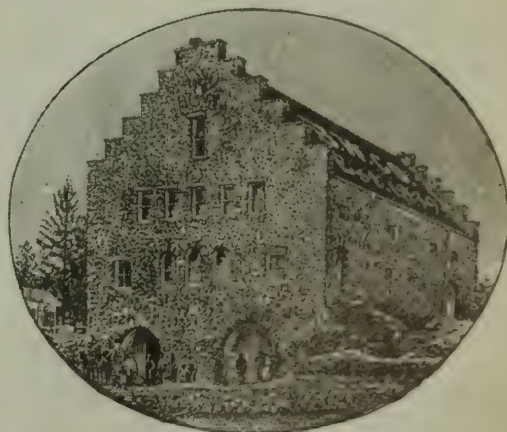
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for cooking with wine and over fifty different formulas
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Send me 15 Yearly Subscriptions to
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at One Dollar each and get a

SHAKESPEARE ..REEL..

It is one of the finest pieces of metal work imaginable. It has a traveling guide that distributes the line on the spool evenly and symmetrically without thumbing, and as artistically as a silk thread is wound on the spool in my lady's work basket.

You can get the 15 Subscribers in an hour, and the reel will last you a lifetime.

Sail in and provide yourself with one of the best bits of metallic handiwork you ever looked at.

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Double Ender Pleasure Boat

You will soon make your preparations for Summer Vacations. Send for a catalogue of Mullins' Metal Boats and study it thoroughly

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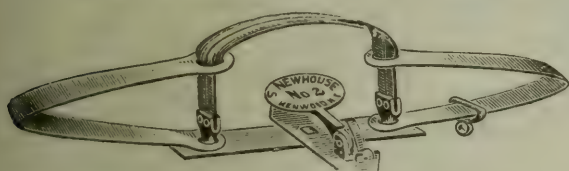
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Fly Rods
10 feet, 6 ounces

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SLACK LINE loses many a fish—all the "big ones."
They can't get slack line if you use the only *real* reel, the

**MILAM
FRANKFORT-KENTUCKY
REEL**

because it's made right—a most perfect mechanism.

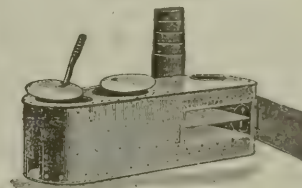
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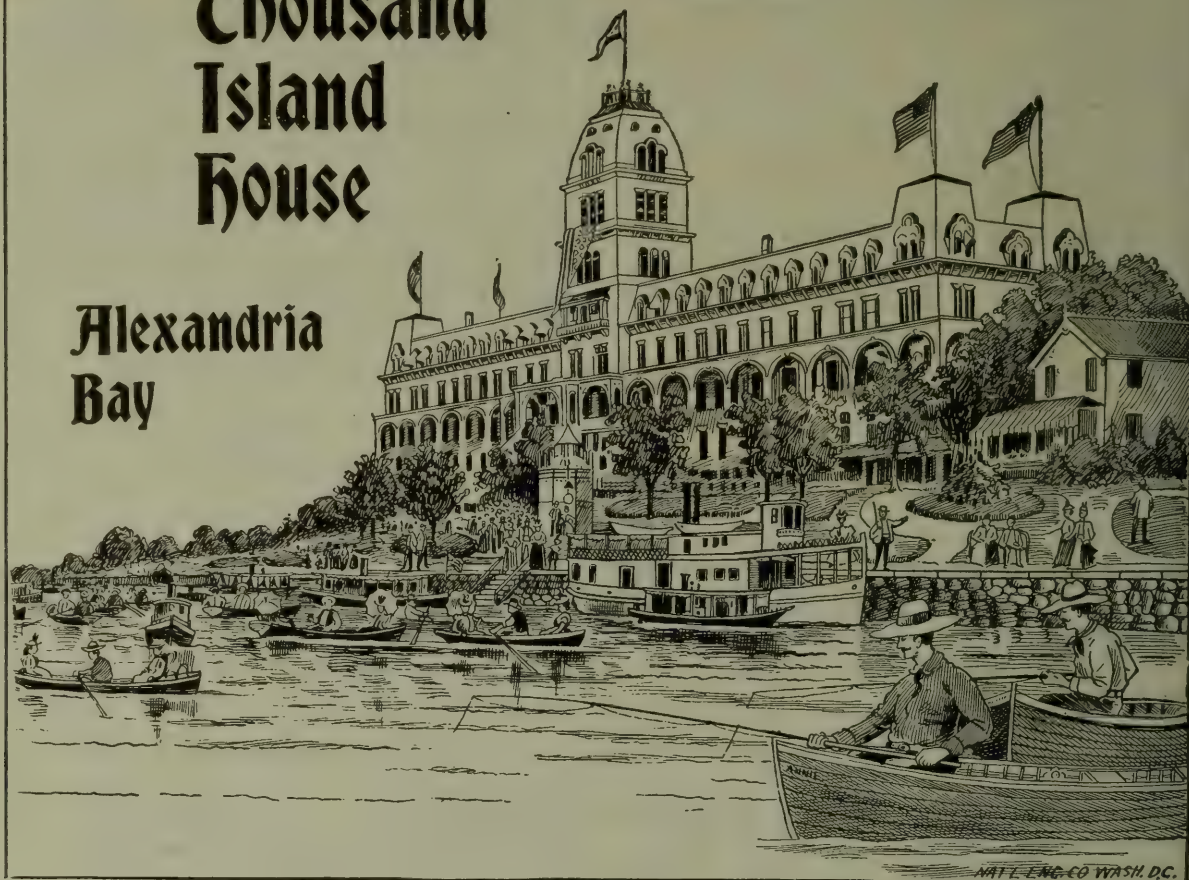
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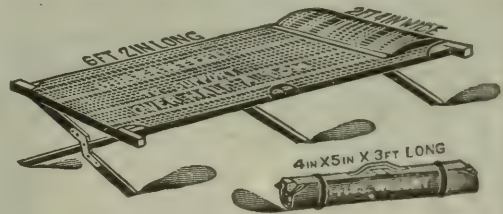
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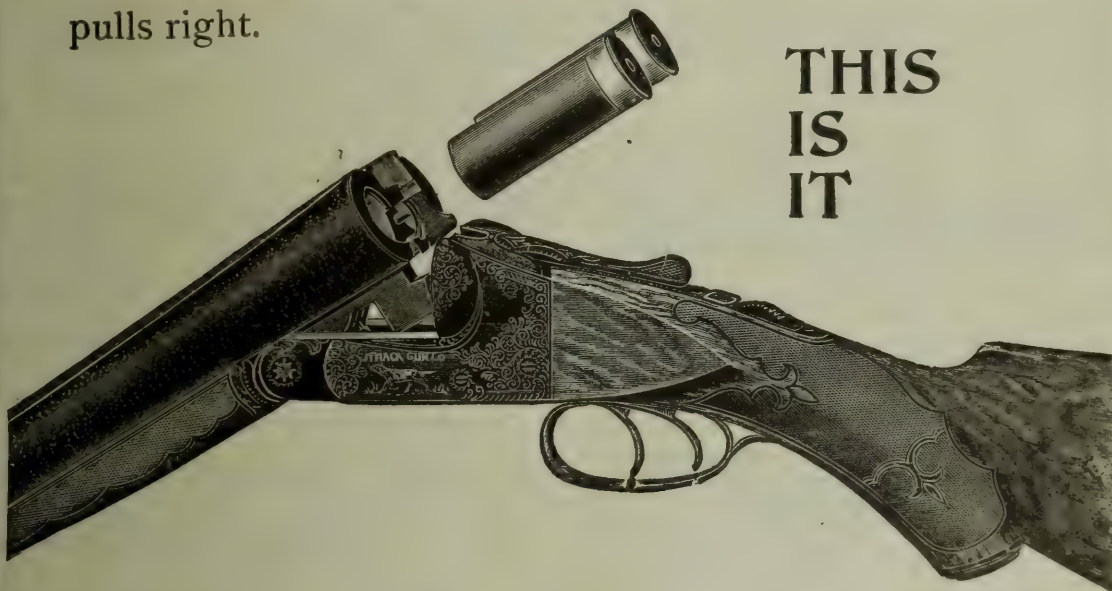
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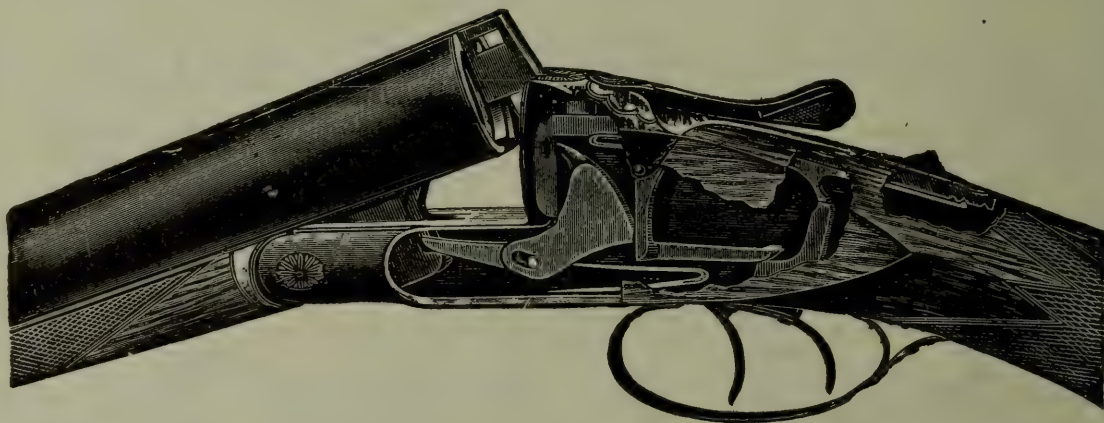
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Copyright, December, 1899, by G. O. Shields

A Monthly Magazine Devoted to Everything the Name Implies

\$1.00 A YEAR.
10 CENTS A COPY.

G. O. SHIELDS (COQUINA),
Editor and Manager.

23 WEST 24TH STREET,
NEW YORK.

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Fine Guns

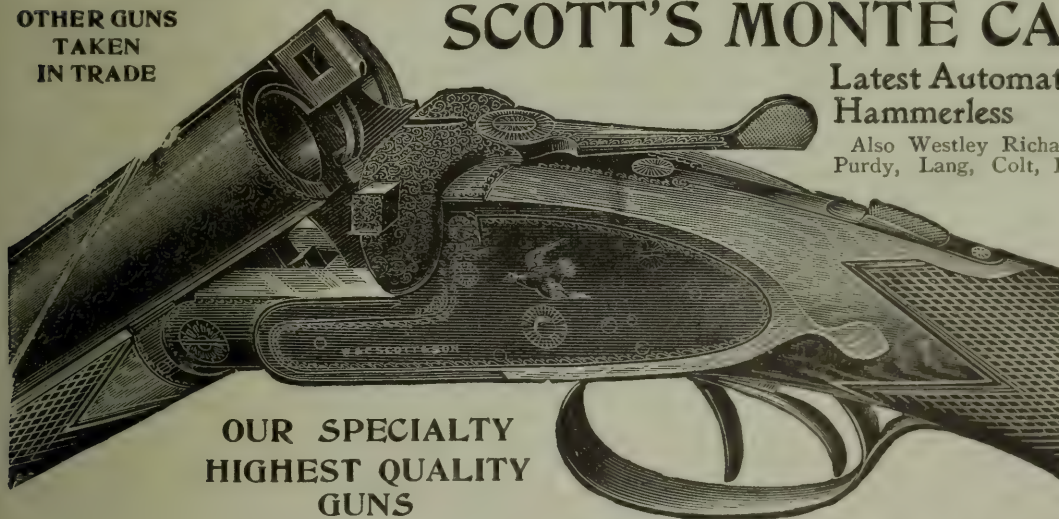
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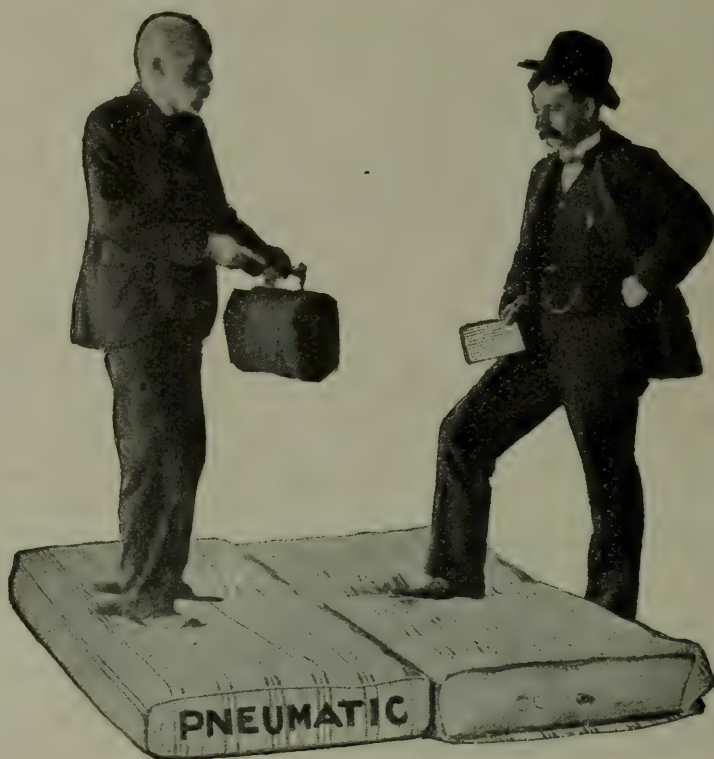
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
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we can do the Fifth Avenue style of work at modest prices. Give us a trial and we will convince you of the truth of these statements.

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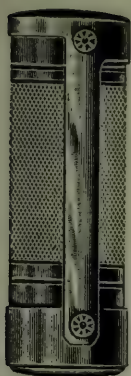
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Recreation

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For 2 yearly
subscriptions to

RECREATION

at \$1 each.

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It holds enough matches to keep a hunter in smokes and fires a week.

To crown all, it's water-proof. Soak it in a pail of water over night and the matches are as dry as tinder.

You can get the 2 subscriptions in 10 minutes and then you'll get a water-proof match box that will last you the rest of your life.

Papa says **LION BRAND**

things
give
hot
day
comfort.



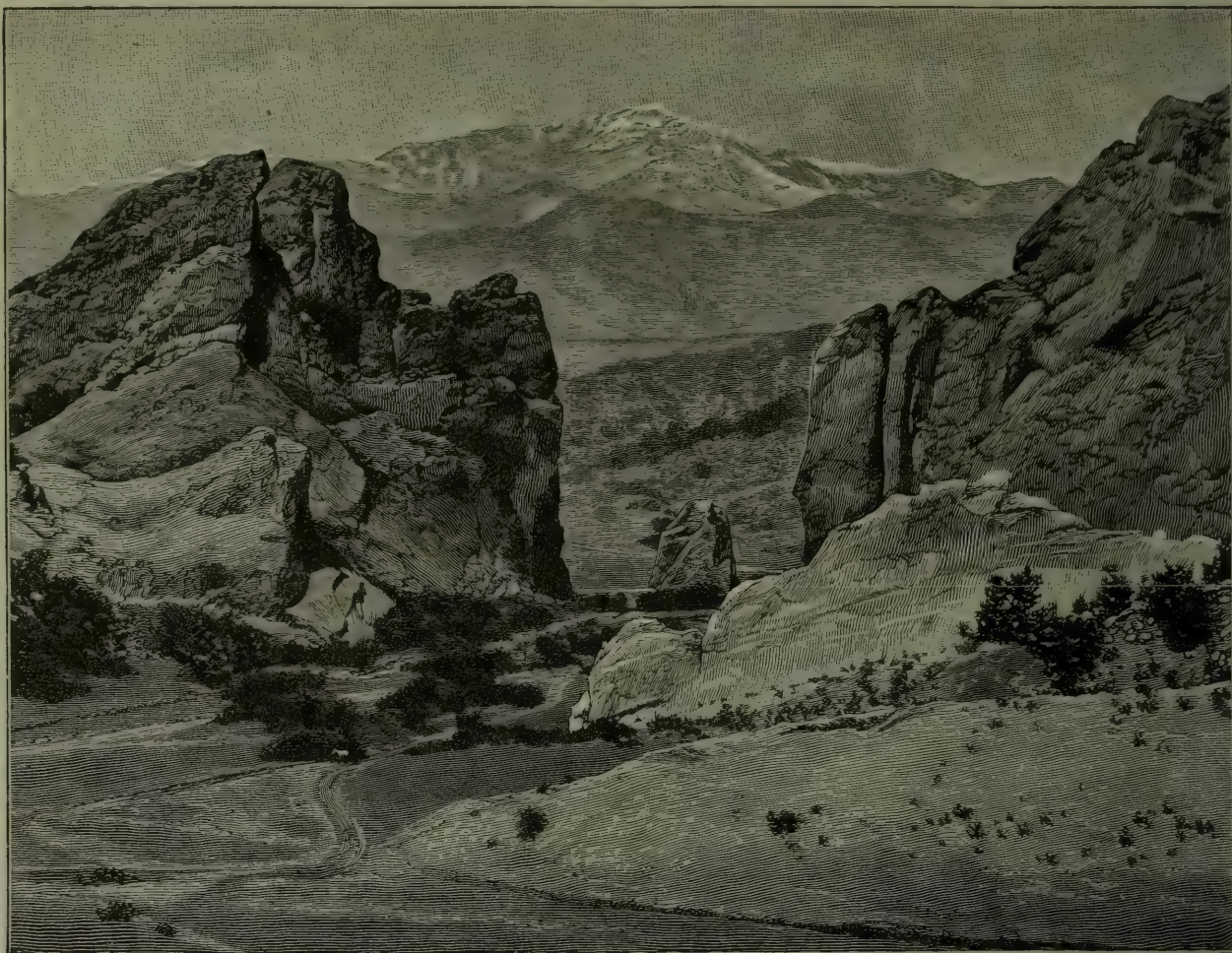
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CUFFS**

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United Shirt & Collar Co.

Makers

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Burlington
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Height, 4 feet.

Diameter, 19 in.

== Contains ==
465 lbs. of Soap

A WILLIAMS Shaving Stick of the ordinary size will furnish about 300 shaves. This mammoth shaving stick is equal to 4,450 of the ordinary size — or enough to shave a man every day in the year for 3,657 years!

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Williams' Shaving Soaps are used by all first-class barbers, and are sold everywhere.
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Luxury Shaving Tablet, 25 cents.

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Williams' Shaving Soap (Barbers') 6 round cakes, 1 lb., 40 cts. Exquisite also for toilet.

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DRESDEN
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The Adirondacks. ❧

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SACONDAGA LAKE HOTEL,
AND COTTAGES.

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Keeping open the year round we can afford

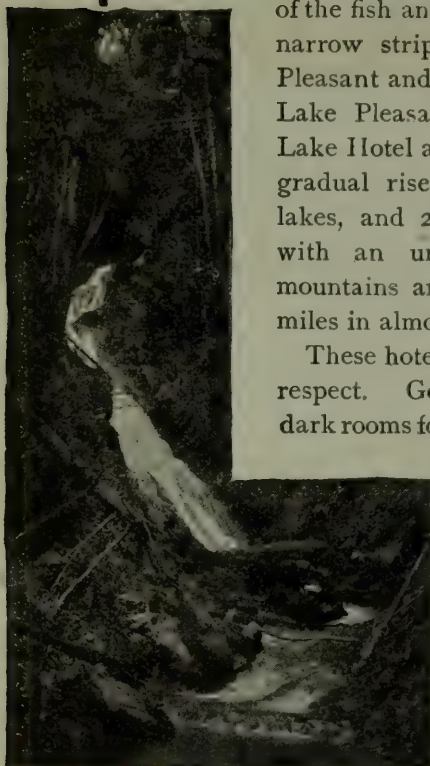
to charge a much lower rate for the excellent accommodations than many of the hotels that have but a short season and are compelled to make all their profits for the year in a few weeks.

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PAGE WOVEN WIRE FENCE CO.

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**GUARANTEED
SELF OPERATING
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BURNS
LOOSE CARBIDE**

**EXAMINE IT
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**IT'S
PROOF**

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MFG. CO.**
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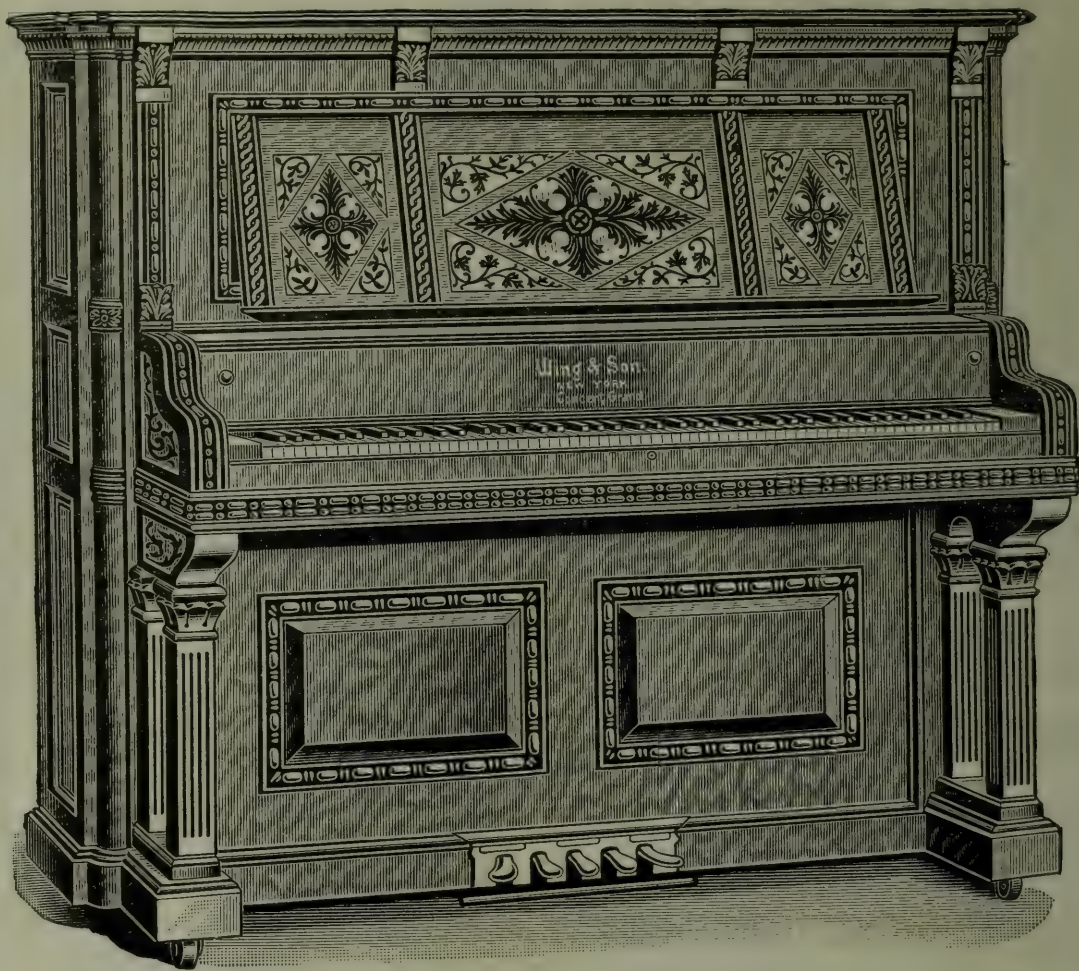
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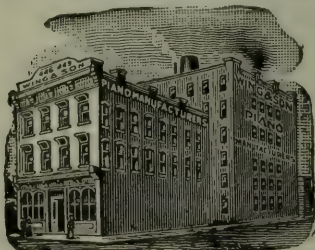
We sell the Wing Piano on easy terms of payments and take old instruments in exchange.



*We aim to make the best piano possible and to sell it at the lowest price possible.
If you wish to buy a fine piano at a low price, write us.*

SENT ON TRIAL FREIGHT PREPAID. We will send this piano or your choice of 23 other Wing Pianos on trial, to any part of the United States, all freights paid by us. We will allow ample time for a thorough examination and trial in the home, and if the piano is not entirely satisfactory in every respect we will take it back at our own expense. There is no risk or expense to the person ordering the piano. No money is sent to us in advance, we pay all freights.

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Every Wing Piano is guaranteed for twelve (12) years against any defect in tone, action, workmanship or material.

Everyone who intends to purchase a piano should have our complete catalogue. We send it free on request.

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1868—32nd Year—1900.

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18 "	2 "	300.
21 "	3 "	450.
25 "	4 "	650.
30 "	6 "	850.

Sail Yachts, \$150 and up

Row Boats, 20 "

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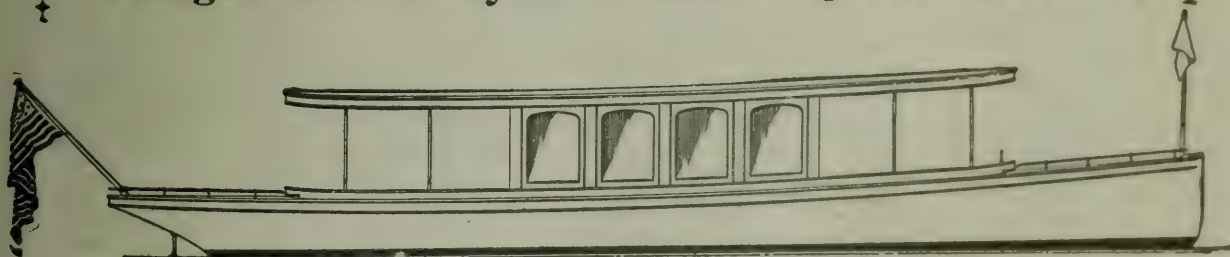
Steam and Sail

... YACHTS ...

Steel, Wood, Aluminum
ROW BOATS, CANOES
HUNTING BOATS

SHELLS BARGES
DINGHEYS
YACHT TENDERS
ENGINES BOILERS
Light draught Launches
and Steamers

A large stock always on hand for prompt delivery



35 foot Cabin Launch

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30 foot Cabin Launch, as shown above, beautifully finished	\$1,250.
35 " " " " " "	1,500.
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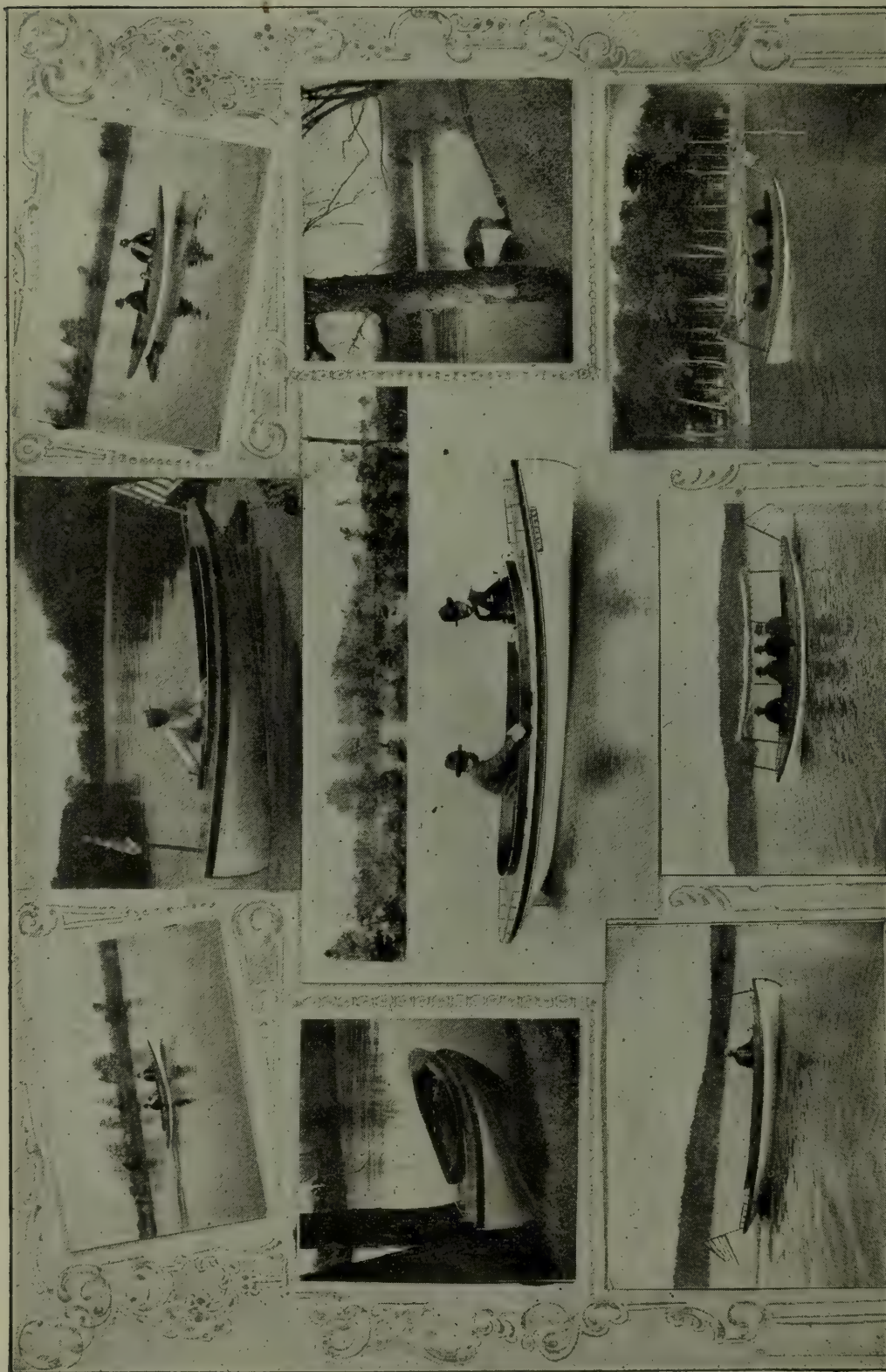
Our large 76 page illustrated catalogue, describing Steam Yachts, Sail Yachts, Launches, Row Boats, Canoes, etc., in detail, will be mailed you upon receipt of 10c. to cover mailing charges. Address all letters to

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Your
experience
this year will
be the same
as the
experience
of our
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the past
veral years.

Purchase
the best at
the lowest
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We can furnish 16 foot and 18 foot launches, with one horse power engine complete in one week's time. All sizes and styles built to order

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**Builders of HIGH GRADE LAUNCHES
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Absolutely as strong and safe as a wooden Boat.

Quickly set up and taken down.

Folds into a small package.

Has improvements not on any other make of Canvas Boat.

Our catalogue with full description and testimonials free.

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Dept. C. Muncie, Ind.



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GUARANTEED all wool, seamless, elastic, close fitting, binds nowhere, warm, comfortable, and convenient. Designed

especially for duck shooters, trap shooters, etc. but suitable for all outdoor purposes, if warmth and other qualities are a consideration.

For sale by sporting goods and clothing dealers generally. If your dealer does not handle it and will not order a jacket for you, send us \$4.00 and your size and we will make one to your measure. Dead grass color used when not otherwise ordered. We deliver to any address in the United States by express, charges paid.

GEO. F. WEBBER,

47 Milwaukee Ave., West, Detroit, Mich.

INVESTIGATE THOROUGHLY

BEFORE YOU PURCHASE A TYPEWRITER.

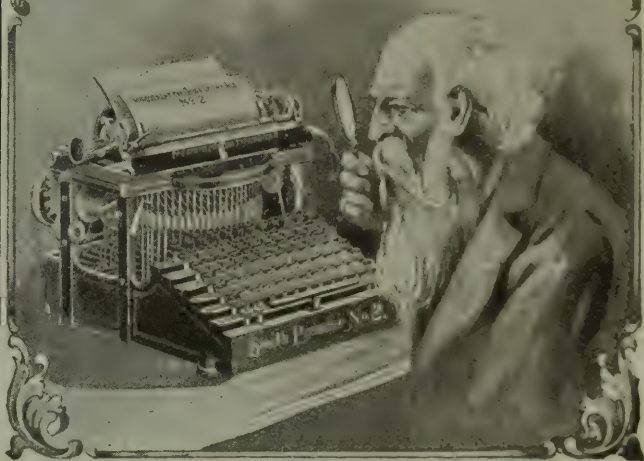
THE SMITH PREMIER

Will merit your approval as it fully meets requirements at every point.

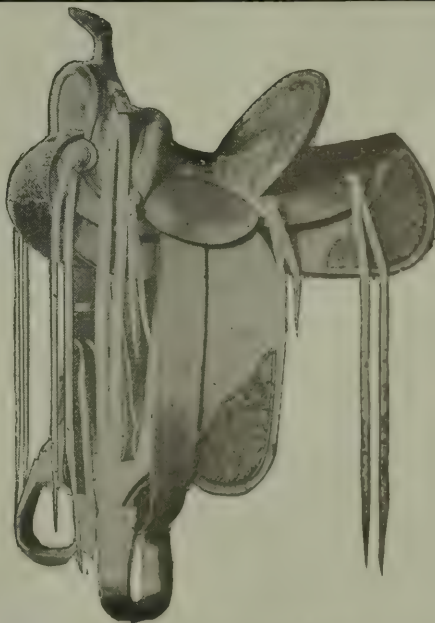
ART CATALOGUE FOR THE ASKING.

THE SMITH PREMIER TYPEWRITER CO.

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E. M. HUFF, Forsyth, Mont.
...Manufacturer of.
Fine Stock Saddles and Harness



Saddle No. 192, Price \$55.00

Chaparejos Side Saddles
Hand Carved Leather Goods

Dealer in

Fancy Silver Inlaid Bits and Spurs
Navajo Blankets Mexican Sombreros
Tents, Tarpaulins Trunks and Valises
Write for prices. Mention RECREATION.

Schlitz



THE BEER
THAT MADE
MILWAUKEE
FAMOUS.

COPYRIGHT 1906 BY ALFRED YON EITZHAUSEN, MILWAUKEE, WIS.

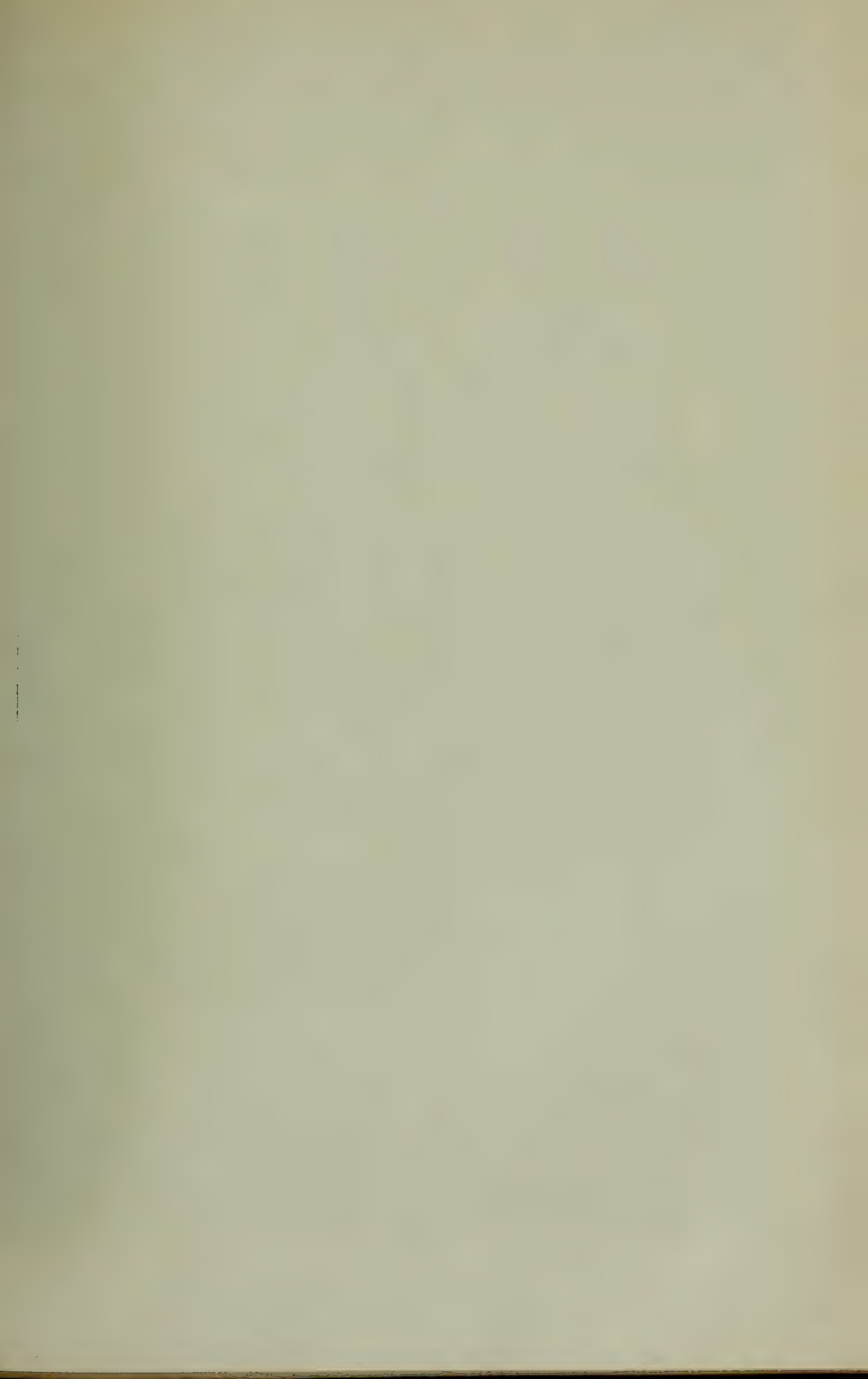
Cooled in Filtered air

In the Schlitz brewery you will find a plate-glass room. In it are cooling pipes, over which the hot beer drips. Above it is an air filter, and no air comes to this room save through that filter.

No germs can reach beer handled with such rare caution. But, after the beer is aged, we filter it, then bottle and seal it, then sterilize every bottle.

We take triple precautions because beer is a saccharine product. Impurities multiply if they get into it. There is no grade between absolute purity and utter impurity.

Every bottle of Schlitz is absolutely pure, and purity is healthfulness. Your physician knows—ask him.





"I'VE GOT HIM."

RECREATION

Volume XII.

JUNE, 1900.

Number 6.

G. O. SHIELDS (COQUINA), Editor and Manager.

THE ANGLER'S PASSION.

G. A. WARBURTON.

The true angler can not think calmly of his favorite sport. He feels an uncontrollable passion for it. It is this yearning, impelling force which separates him from ordinary pleasure seekers. They are fond of one or another form of recreation, sometimes taking it up with enthusiasm, but always mastering the thing they undertake. They know self-restraint and moderation. The angler is swept beyond the point of accountability and becomes drunk with the nectar of his pleasure. Unless a man has felt this delightful slavery let him not think to sit with the true Knights of the Angle! He would be as much out of place as a costermonger in the chapel of the Knights of the Bath at Westminster. The royal touch alone can give him place with dear old Isaac Walton or Christopher North, and the others of their ilk, of whom the world was not worthy. A man may catch sprats for the Bristol markets or salmon from the Restigouche without in either case deserving to be admitted to the select circle. Christopher North could write 2 essays on Wordsworth, so contradictory as to prove a dual authorship by all known principles of criticism; yet in everything he did or said he showed that his master passion was for catching trout in some mountain burn or tarn. And how we have all loved the quaint old Scotchman as we have seen him at the edge of the Dochart under the full power of the angler's passion, reaching out for the rising fish and at last wetting his

brecks and his legs together in the cold water, with never a thought of the rheumatic possibilities of his conduct. I can not read that incident and keep my lashes dry!

I wonder why the fishing passion is so strong and why it strikes men at such strange times. Your true angler may be sitting by his library fire, with the thermometer at zero, conning Whittier's "Snow Bound" or Warner's "Backlog Studies," when suddenly the glowing of an ember or the crackling of a bit of bark on the hickory log reminds him of a little cabin in a Maine forest,

"A little lowly Hermitage it was
Downe in a dale, hard by a forest's side,
Far from resort of people that did pas,
In travaill to and froe: * * * * *
Thereby a christall streame did gently play,
Which from a sacred fountaine welled forth alway,"

and the reader sees another volume, the open book of Nature. The passion has him. Slowly the noise of the children's play in another room gives place to the morning song of birds in fir and balsam trees. Their odor enters his nostrils with soothing, healing influence. It is just daybreak and down to the brookside he walks in solitary expectation. His rod is put together with trembling fingers, for he has just seen the lazy roll of a big fish over at the edge of the limpid stream. A cast, a strike, a rush, a victory for the art of man. Here on the moss lies the vision of beauty, plump and red-spotted. The savage nature cries out to the woodland echoes,

"I've got him!"

"Papa, what's the matter? Are you dreaming?"

No, my child; it is not that. Your sire has the angler's passion; that is all.

Not every one who says, "I go a-fishing," gets into the real spirit of it. To own a fine fly-hook and the best rod ever made is by no means a passport to the angler's kingdom of heaven. In some the inner light has failed because it has not been cultivated. They have grown callous and hard. Whatever those unfortunates may be fit for who have no music in their souls they will never become true anglers. I once went out with a man who lay down to sleep on a haycock within sight of the glorious foothills of the White mountains, close to an amber colored stream where the trout were numerous and hungry. That act spoke his limitations. He might at least have reveled in the poetry of the landscape and the sight and sound of the thrushes and vireos which God had sent for our delectation.

It is generally supposed that the angler feels the first thrill of insatiable desire when the ice is melting and the loosened drops begin their seaward flow. Then, to be sure, the greatest dullard must know it is time to get his tackle ready. But unless a man has the fever when the frosts are strongest he is only at the beginning of his course as an angler of passion. The tying of one's own flies is a splendid whet to the appetite, and that is done when the nights are long and the fireside comfortable. How much keen pleasure comes from the handling of material! In those sacred moments when the vice is fixed and the various implements are brought, with silks and feathers, hooks and snell all at hand and in sight, we live again the days that are dead and make demands, that are always met, upon the joys of the days to be. This crow's wing and that brown hackle or bit of

feather from a mallard's breast, each has its own story.

Those who are dominated by any passion brook no interference with their plans and count no task hard. Once let the spark of suggestion touch the stubble of desire and up it blazes like the corn fields of the Philistines when Samson's foxes tore through them with their firebrands. The very impediments furnish fuel for the flames.

Every angler has his favorite stream, at the thought of which his pulses quicken and at whose sight and sound he is possessed by the most passionate frenzy of delight. It may be some narrow mountain brook that begins its modest course among the high, bare rocks and makes up in turbulence what it lacks in size. Such streams are the home of hardy trout, unsurpassed in loveliness and toothsome flavor. Or perchance my angler's heart may be buried in the placid waters of some slow-going meadow brook, where grasses grow above it and wild flowers nod to see their beauty mirrored in its face. If not to such scenes I know the spot that holds him with the strong grip of enthusiastic love. It is where

"The murm'ring pines and the hemlocks"

stand as faithful sentinels by night and day on the shores of a deep, sweet-watered pond. The browsing deer at the edges and the solitary loon on the surface are his only companions; and the way back to civilization is over the trail first followed by the Indians in their journeyings to and fro. But in any case the quality of his love is the same and it grows most by being concentrated. The angler may have a tender feeling toward all inhabited waters, as Burns had for all Scotch lassies; but it was concentrated passion that caused him to sing to Mary in heaven.

Every true man respects all true women, but he loves the wife of his bosom. Flowing waters especially need to be wooed and won. How shy

the running brook is as she hides under the bending willow or hurries out of sight beneath the shelter of the alder boughs. Like the modest violet that seems to dread a comparison of its tiny bit of blue with the immensity of the great sky, the brook is always trying to get out of sight. To be sure, the brook is sometimes playful and merry, singing and dancing with a winning motion and a smiling face. To see her then one would think she never had a sorrow or a dark day. Yet what true lover does not know there are thick clouds that stop the sunbeams from shining on her face and great boulders in every brook path that must be met and passed. John Burroughs reminds us that obstructions in both brooks and lives seem to make the current deeper. The angler respects the brook's purity and never steps into it, when walking on the moss at the side will do just as well. No stream looks attractive when it is roily, and the angler's suc-

cess lies along the pathway of consideration and respect. He learns to know the whims and caprices of his favorite brooks and his "Remembered Little Rivers"; and when far away from them, like Wordsworth's daffodils,

"They flash upon that inward eye
Which is the bliss of solitude."

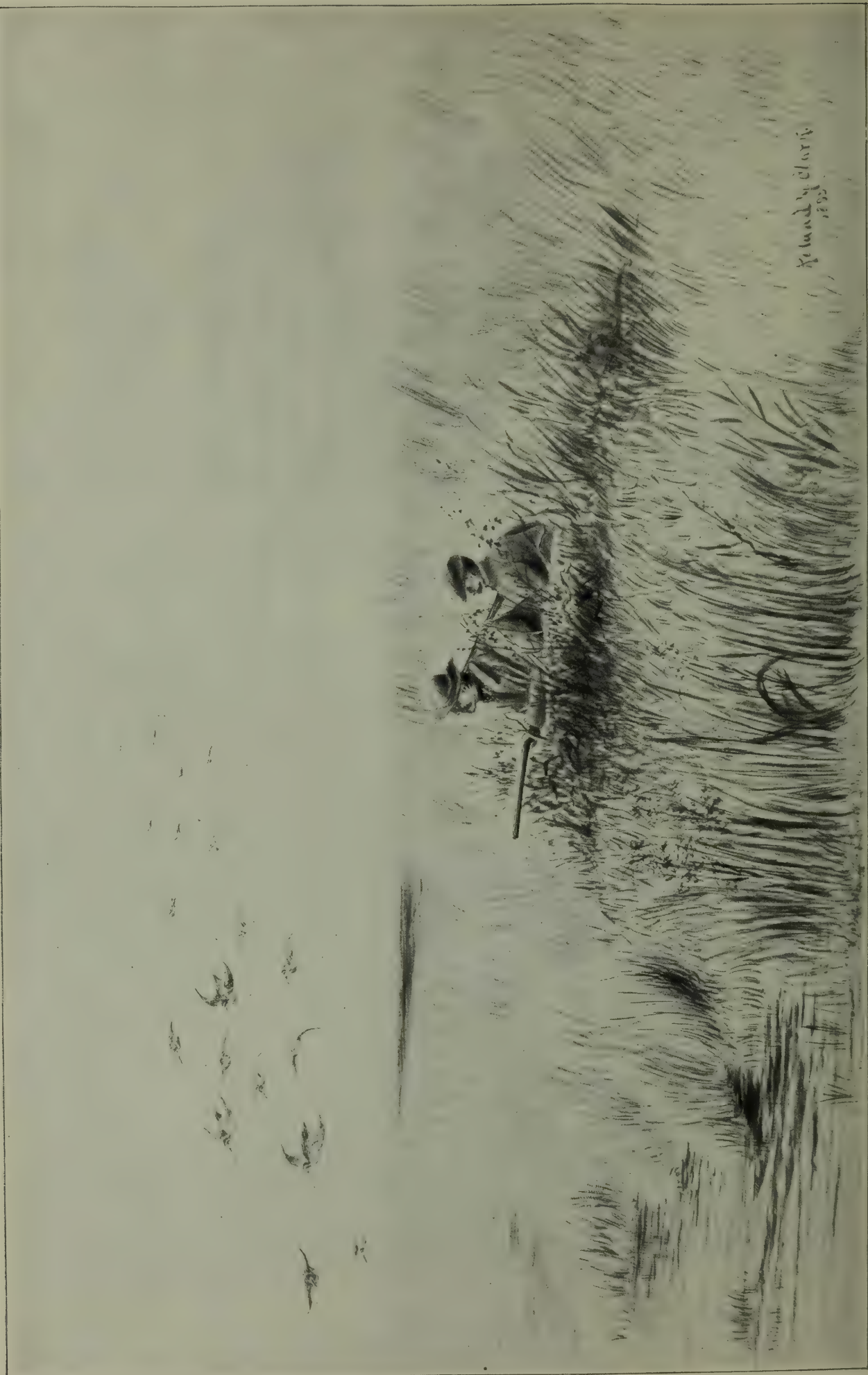
Happy indeed is he who begins the cultivation of the angler's passion as a boy, before the cry of other allurements is heard. The lad may not know what is happening in his life, the buttressing of his soul with pure and noble thoughts. Life is getting its direction and impulse. Naturalism is being solidified in him so that artificiality may find no welcome. The boy thinks he is angling for trout and that his creel will contain his catch at nightfall; but those who have angled longer than he, and not always on smooth waters, know well that physical and moral fiber are the best crown and fruitage of an angler's love.



NOT AN AFFAIR OF HONOR.

AMATEUR PHOTO BY H. S. JOHNSON.

Highly Commended in RECREATION's 4th Annual Photo Competition.



Helena, 1893

"THEY WERE SO NEAR WE COULD HEAR THE RUSTLE OF THEIR WINGS."

CURLEW IN LITTLE RHODA.

J. B. DUNN, JR.

About 3.45 a. m., August 9th, 1896, it was raining great guns. Bunker and I had planned and made all preparations the day before for a trip to the marsh, and no amount of rain could stop us. We did not expect to get many birds, so, with the exception of a few charges of 2's, we carried nothing but light shot. Soon after we left the house, however, the rain ceased, and by the time we reached the marsh the weather looked as if it would clear.

A large sand flat lay to the Westward of the marsh. We landed on that, pulling our boat well up, out of the reach of the tide. While doing this I noticed several large birds feeding quietly on the sand, some 200 yards away. Having secured the boat, we held a council of war. As the birds did not seem frightened, we decided to try to crawl up within gun range. We separated, both advancing cautiously, one on either side. We had gone but a short distance when the flock arose and started toward us, but instead of going over us they veered and came past me, about 50 yards away. My gun was a 24-inch barrel. Although small, it would show astonishing results at long range, and when the birds got about opposite I gave them a charge of 8's. At first I believed I had made a clean miss, but Bunker, although farther away from the birds than I, declared he saw one drop out of the bunch shortly after I fired. In a few minutes we discovered him lying in the water, about 100 yards off shore. As the water was deep, I was compelled to swim for my game; but on picking him up I was surprised and delighted to find I had knocked over a curlew. I speedily came to the conclusion that the whole bunch must have been curlew, instead of plover, which we first supposed them to be.

While I was putting on my clothes I noticed several bunches of large birds going up the pond, and we made haste to get behind a blind, expecting every second to see a bunch coming over the marsh. We had hardly got settled before a large flock came our way. They got within 50 yards before they turned, and that was near enough for us to get one apiece. After a

number of bunches had come up at long range and gone off again, more or less unharmed, we began to lament having left our heavy shot at home. Now and then, however, a bunch would come near enough for us to get in 4 or 6 barrels with good results, although we never succeeded in getting more than one to a barrel. My companion had a Winchester repeating shot gun.

The flight slackened between 6 and 7 o'clock, so we sat on the marsh grass, talking over our wonderful good luck. I happened to cast my eyes Eastward, for the curlew had been coming from the East, going West, when I saw one of the grandest sights I ever expect to see while shooting shore birds. Over the beach bank more than $\frac{1}{4}$ of a mile away I saw at least 150 dark objects strung out in one long, unbroken line, and steadily advancing toward us. They were curlew. As they came near we could see them distinctly, and we began to hug that wet, soggy ground as if it were our dearest friend. When they were within 150 yards of us they started to turn off toward the pond, but a few well executed whistles changed their minds and on they came. Soon they were so near we could hear the whistle of their wings, and a moment later they heard the whistle of 8's. We killed 4 and knocked down 2 others. That may seem a small number out of so many birds, yet each bird required a charge of shot.

After that large bunch had passed we only got one or 2 more shots, and about 8 o'clock we started for home. As we were pushing the boat off we saw a small bunch coming up the marsh, and by calling succeeded in getting them near enough to secure one.

All the fun wasn't in killing the birds. The look of amazement on my brother's face when we got home was worth the price of admission. I met an old settler a few days later, and he said such flights occurred regularly years before, but he had not heard of one in 10 years. They were our first curlew, too, although we didn't tell anybody that.

"You are a jewel," said a lady to a gentleman who had given up his seat to her.

"Oh, no," he replied. "I am a jeweler; I have just set the jewel."—Chicago News.

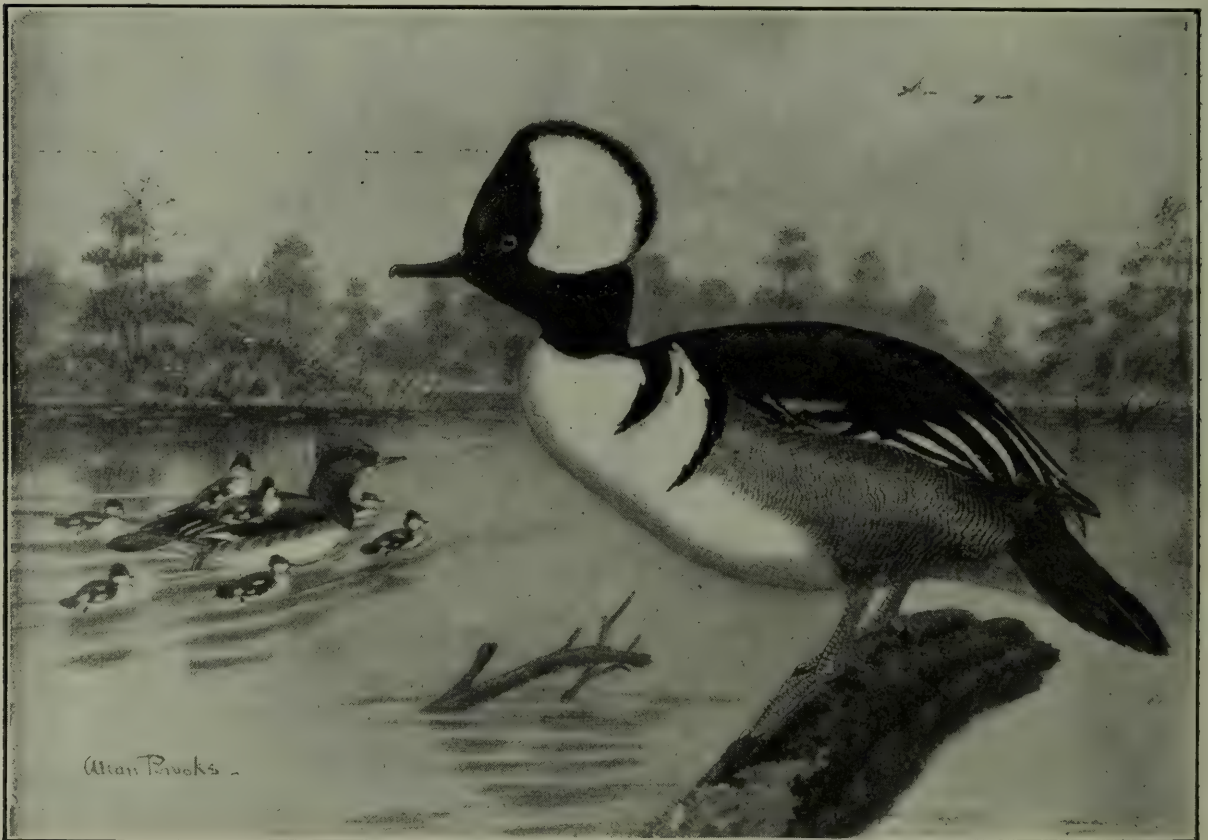
THE HOODED MERGANSER, *ANATIDAE LOPHODYTES CUCULLATUS*.

ALLAN BROOKS.

This beautiful little duck occurs throughout North America below the Arctic zone, and is found in all sorts of localities. From its tree-nesting habits it is often confused with the wood duck; but, unlike that species, it never perches on trees. At least, I have never seen it do so.

It keeps to the smaller streams and swamps, as a rule, until driven by frost to seek the sea or larger rivers and lakes. It is one of the first ducks to return in spring in Eastern Canada. As soon as the creeks

down in a hollow tree, sometimes at a great distance from the ground. The female carries the young, as soon as hatched, to the nearest water. Exactly how this is done is a puzzle. Most authorities claim that the young one is pressed by the bill against the breast, the body being held in the curve of the mother's neck. An eye witness, however, informed me that the mother sailed from the tree with only a slight tremulous movement of the wings, which were held rather high, the little one



HOODED MERGANSER, *ANATIDAE LOPHODYTES CUCULLATUS*.

begin to break up this jaunty little migrant can be seen following all the windings of the stream in its arrow-like flight.

It is an expert diver in spite of its rather small feet, and, unlike the larger mergansers, seems to prefer small shellfish and water insects to fish; although it does not refuse small minnows when it can get them.

The nesting season of the merganser is, as a rule, rather earlier than that of most other ducks. The eggs are laid on a bed of

being between them on the mother's back, as nearly as he could ascertain.

The mother merganser, with her brood of tiny ducklings, is a very pretty sight. When alarmed she swims rapidly away, some of the young ones on her back and the others close beside her in her wake, at a distance looking like a single duck. When hard pressed the little ones scatter in all directions, seeming to run on the surface of the water at great speed, and diving the instant they stop. The mother,

meanwhile, flies back toward the intruder, imitating all the actions of a winged duck and uttering a loud croak at intervals. This cry is repeated when, the danger being over, she collects her scattered brood. I have often sent my canoe in a wide circle to save a mother duck this anxiety, and have watched her convoy her little fleet away in safety.

Unlike the larger mergansers, this is not an uneatable duck, but is, in my opinion, as good as a scaup or bufflehead.

The iris is yellow in the male hooded merganser, and hazel in the female. The under mandible in the female is generally ochre yellow; feet in both sexes generally olive gray; in adult males sometimes tinged with ochraceous.

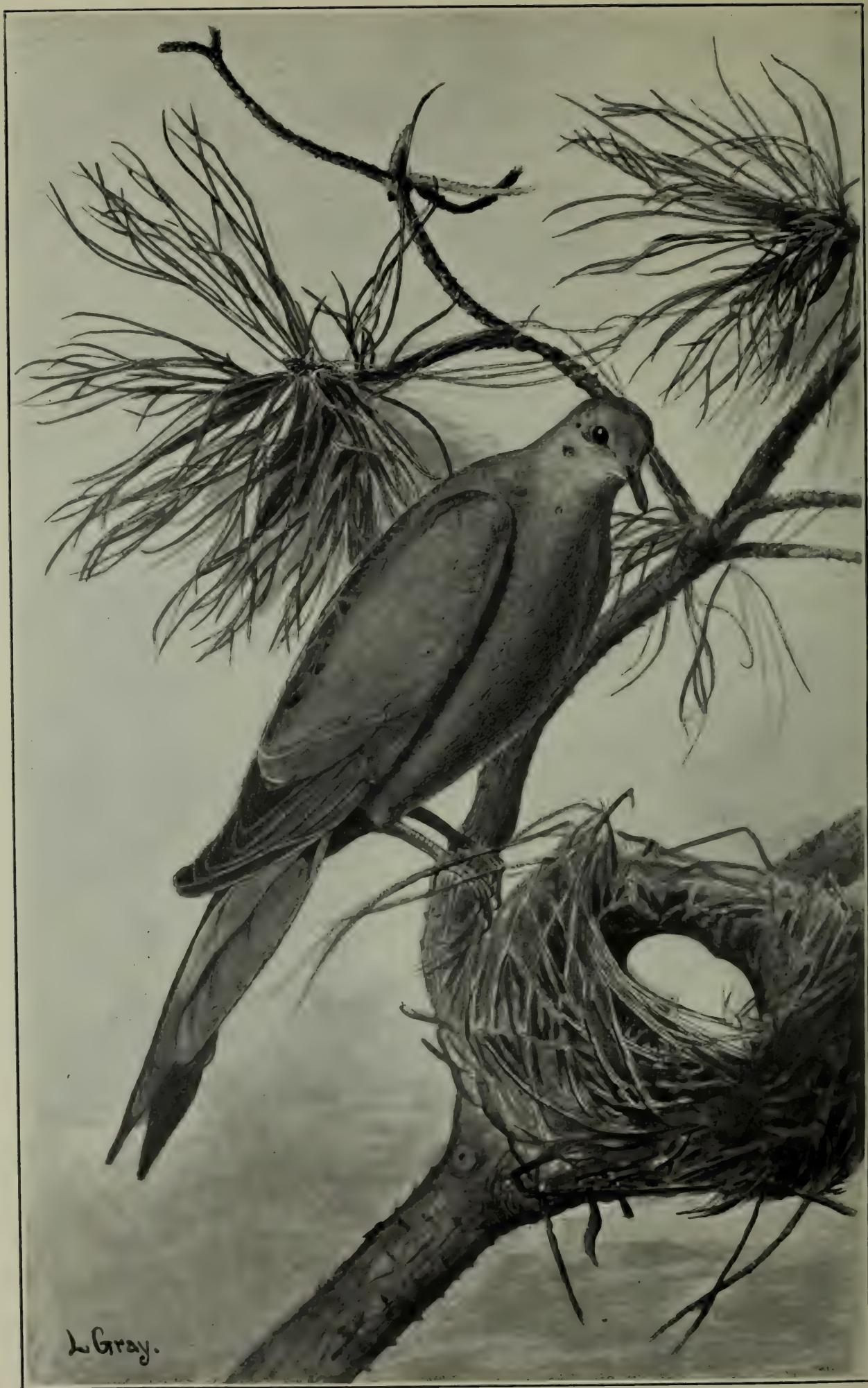


AMATEUR PHOTO BY H. W. STONE.

WAITING FOR A NIBBLE.

"Pa, do any miracles ever happen any more?"

"Yes; one happened to me last night. I told your ma why I was late getting home and she believed me."—Chicago Times-Herald.



THE MOURNING DOVE, *ZENAIIDURA CAROLINENSIS*.

THE SONG MY GOOD REEL SINGS.

FRANK C. REED.

There's many a song in the land to-day,
 And many a tale they bear
 To plodders along their chosen way:
 But sweetest to me and most fair
 Is one of the woods and the open sky,
 Where a bold stream onward swings,
 And the jostling waves go dancing by—
 The song that my good reel sings.

"Zee, Zee!" So it sings in a high pitched
 tone,
 Beginning its merry song
 With a sudden start as my barb strikes
 home,
 And I feel him running strong;
 "Zee, zee!" and it angrily fights the way
 As I lose a fathom of line
 In the first mad rush of my stricken prey;
 But I laugh—he is surely mine.

"Zee, zee! Zee-ee-ee, give 'way, give 'way!
 He sounds! Give him line, give him
 line;"
 Again do I heed what my reel doth say
 (It's old and wise, this reel of mine),
 And meet the fierce surge with a line that
 plays
 To his yet unabated might,
 As he plunges down by devious ways
 To waters far out of sight,
 And sulks, while I limber my cramped-up
 hands
 And drink in forgotten breath,
 Then settle my feet in the shifting sands,
 For now comes freedom or death.

But the reel song speeds, now wary and
 low,
 Bespeaking me caution and care;
 Now high pitched and shrill as, to and fro,
 The battle runs here and there;
 Yet it ends, as everything must, you know,
 For full to the light of the sun,
 A silvery side drifts on the stream's flow,
 And I know that the fight is won.

But care! Though spent as we reel him in,
 His spirit is dauntless still;
 Have caution and care till his tapered fins
 The water's smooth surface shall frill.
 Then, a step to the fore, a dip of the net,
 A long handle skillfully swung;
 A short thrill of pride, a tinge of regret—
 And my good reel's song is sung.

HOW BEAVERS WORK AND LIVE.

T. BICKFORD

While hunting mule deer last fall on the Shell river I ran across a colony of beavers and secured the enclosed series of photos, which may be of interest to your readers. As beavers are now scarce authentic photos of their work are not common.

trees felled by beavers, the largest tree measuring 14 inches across the stump. The branches were cut up and carried to the house for food.

The beavers live in their houses during the winter and feed on their store of green branches, eating the bark off and allow-



BEAVER DAM.

AMATEUR PHOTO BY G. BICKFORD.

This colony was living in the house at the time these photos were made and did the work shown last summer.

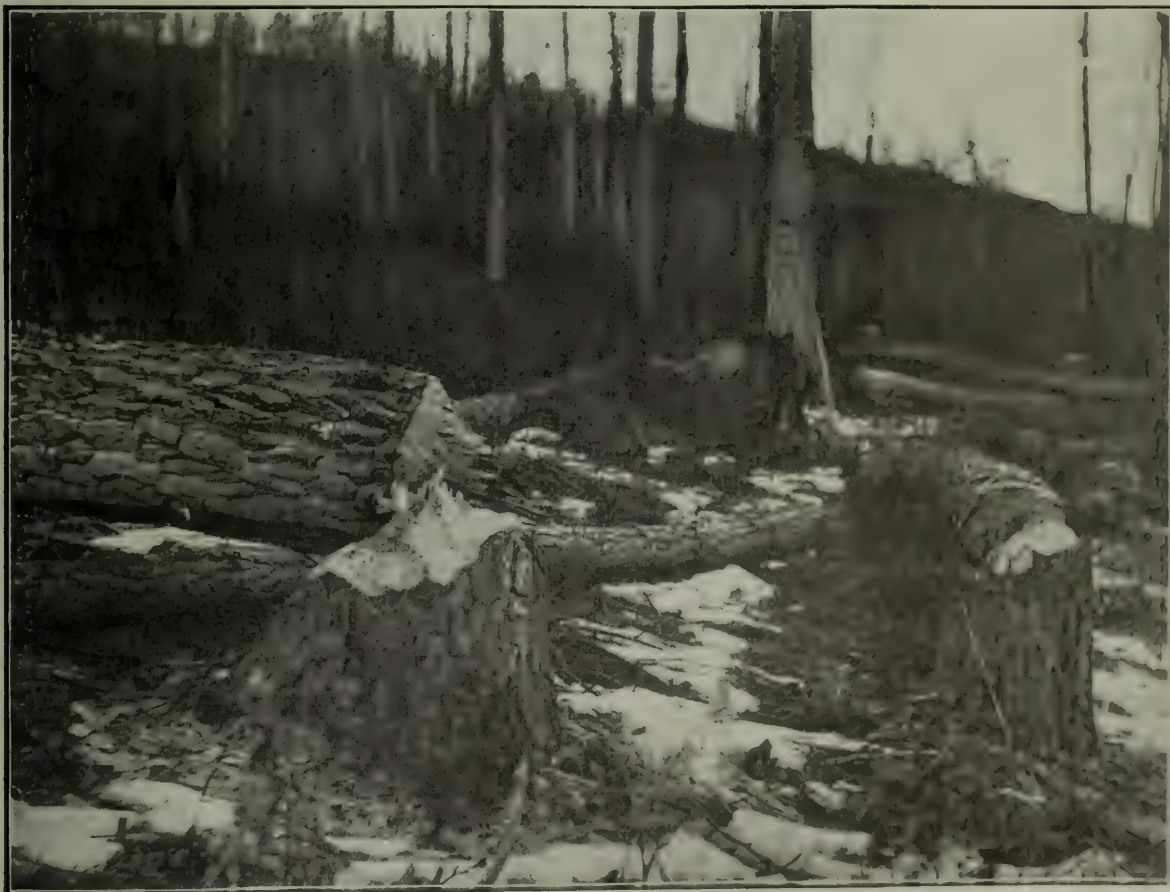
The dam is about 5 feet high, composed of sticks and layers of clay, and is almost water tight. The lodge is built of sticks and clay, and is about 8 feet high. It is a short distance above the dam, in the deepest water. The other photo shows

ing the peeled sticks to float away. These are subsequently used to repair the dam. A beaver is detailed for this duty, who makes daily inspection of the dam and does whatever may be necessary. The ice often freezes 4 or 5 feet thick, so that in order to have storage room under the ice the water must be 9 or 10 feet deep under the house.



BEAVER HOUSE.

AMATEUR PHOTO BY G. BICKFORD



TREES FELLED BY BEAVERS

AMATEUR PHOTO BY G. BICKFORD

A GRIZZLY AT CLOSE RANGE.

FRED C. HOWE.

We were camped on the North fork of Shoshone river, about 25 or 30 miles from its head water. We had reached that spot after a tiresome trip through the Yellowstone Park, by crossing that fragment of the Inferno known as Sunlight Divide, and pushing down the river. At that point it runs nearly West to East, and is reinforced at intervals by creeks flowing into it on either side, from the high mountain ranges which bound the valley on the North and South.

This is one of the most promising sections in the United States for big game of all kinds.

Our party consisted of Sam, myself, old Charles (our guide), and 6 horses. It had been my desire from boyhood to try my hand at big game shooting, and after having been disappointed in all my previous plans for such an excursion as we were then enjoying, my enthusiasm may be imagined when at last I had a good prospect of gratifying my ambition.

We spent several days in camp, and filled our stomachs with venison, elk meat, grouse and mountain trout. Our allotted time was fast drawing to a close, yet I had not had the pleasure of trying my gun on a bear. My hopes in that direction were rapidly sinking when one evening, while sitting around our camp fire, old Charlie told me I still had one more fairly good chance of at least getting sight of old Bruin.

In pursuance of his suggestion he and I turned out earlier than usual next morning, and started up the river on horseback to a spot where he had killed an elk some days before and had left that part of the carcass which we did not wish for food. This spot was some 15 miles up the river and 4 or 5 miles South, on one of the creeks which flowed into the main stream from that direction.

Our trail was rough, and we had to ford the river several times. It must have been nearly noon when we reached the location sought, and came out on a small park, or open space, in the timber. This little park was covered with excellent feed for the horses, and had a small mountain stream running through it. It was not more than a mile from the scene of the killing of the elk some days before.

We decided to leave our horses there and proceed on foot to the spot where we expected to find a bear lunching from the remains of the elk. I followed old Charlie's instructions to go due West about a mile,

while he followed a rambling trail of blazed trees which he had made while packing out the meat of the elk.

After making my way through the timber for some distance in the direction indicated, I began to get the odor of the putrid meat, and this odor became stronger as I proceeded.

In my excitement all thought of Charlie and our plan to come together on the scene of battle vanished from my mind. Making sure that the magazine of my rifle was properly filled with ammunition I proceeded as cautiously as possible, in the direction of the odor, which was by that time very strong. Suddenly, at my left, Mr. Grizzly appeared. He was enjoying his noonday lunch, bear fashion, with the shank bone of the elk between his paws.

Evidently he became aware of my presence at the same instant I saw him, for he dropped the bone, and rising on his haunches, cast an inquiring look in my direction. I was on one knee in a second, and much to my surprise, when I think of it now, all my nervousness and excitement of a few moments before had left me. I was as calm as though I had met a friend by appointment.

Neither of us moved for a second. Then I fired and the bear, dropping to all fours, walked leisurely around to the opposite side of the carcass.

I never knew whether that first shot took effect. As he came around the carcass and emerged from behind a huge tree I fired again. He gave a hideous grunt, or growl, and bit with his teeth at his shoulder as though stung by a bee. Then he started in my direction with that peculiar gait which is apparently so slow, and yet covers the ground with such astonishing speed.

I remained in my previous position, working the lever of my rifle with a rapidity I had never before been able to attain, and threw the bullets into his neck and breast, never taking the gun from my shoulder. This had no apparent effect on the bear, for on he came, seeming to grow larger and larger at every jump, till he assumed the proportions of an elephant in my eyes, making a target it would have been hard to miss. His ears were laid back close to his head, his mouth was open, and his white teeth glistening in the sunlight, as he growled and snarled at every jump. My sensations during those few seconds were entirely new, and not altogether pleasant. To my supreme relief, when within 30 feet of me, the bear began to stagger

from side to side. Another well aimed shot brought his nose to the ground, and after a few kicks he lay dead before me.

I had fired not less than 8 shots at him, and we found on taking off his hide that 6 of them had taken effect.

When the fusillade began the bear was about 60 or 75 yards from me, and as above stated not more than 30 feet when he fell.

On hearing the shooting old Charlie at once made for the scene of battle, arriving there just in time to see its close. His first remark, as he came up breathless behind me was, "By —— feller, you closed your contract just in time. Another jump or 2 and you would have had to pull your knife on him."

The humor of this last remark occurred to me when we began to skin the bear, and it took nearly all my strength to puncture his hide with my knife. I imagined myself standing up before his highness and trying to defend myself with a

knife which it was nearly impossible to push through his hide when he lay dead on the ground.

After our lunch of cold griddle cakes, the remains of our breakfast which I had put in the pocket of my hunting coat, we went back after our horses, packed the hide and skull on old Buck and proceeded campward, arriving there just at sundown to receive the congratulations of my friend, Sam.

My ambition having been thoroughly gratified, we broke camp next morning and returned to Red Lodge, Montana, which we reached after 5½ days' hard travel over some of the roughest and most desolate country I have ever seen.

The gun I used in that instance was a .44-40. It was rather light for such an encounter, but it did the work, and is now one of my most highly prized possessions.



AMATEUR PHOTO BY JOHN BOYD.

THE YOUNG BOTANIST.

Winner of 45th prize in RECREATION'S 4th Annual Photo Competition.

Enclosed photo is of a mallard drake that was shot while climbing for the clouds, and in falling was impaled on a willow bush. About 8 inches of the bush stick



out of his back. You can imagine how high he was and how hard he must have fallen.

H. P., Seattle, Wash.

Fannie—If you are so positive Harry loves you, why don't you accept him and get married.

Jane—He won't ask me.—Detroit Free Press.

Nellie—Charlie says I grow more beautiful every time he sees me.

Maude—If that's the case you ought to have him call twice a day.—Chicago News.



"THE OLD MONARCH SWUNG HIS HEAD AND LOOKED BACK."

HUNTING THE WHITE CARIBOU,

S. C. T.

In October last I was invited by Frank Seaman, him of the Gramophone and the big advertising agency, to go to Newfoundland to hunt caribou. We left New York on the night of the 14th, via the New York Central to Montreal, thence by the Intercolonial Railway to North Sidney, Nova Scotia; thence by the steamship Bruce to Bay of Islands; thence over the Newfoundland Railway System to Deer lake. There we were met by George and William Nichols, who live at that station, and whom we had engaged as guides.

They took us across Deer lake to their farmhouse, where we arrived at 10 o'clock at night, in a drenching rain. When we got up next morning it was still raining, and as a certain weather reporter once said, "Was cloudy all over, clear down to the edges." It looked as if it might rain a month, and as our time on the hunting grounds was limited to a few days, we pulled out at once. Our course lay up the Humber river, a magnificent stream averaging 100 to 150 yards in width. The guides stored our duffle in 2 log canoes, manned by George and William. Their brother Ed was also placed in William's canoe as helper.

At noon we went ashore at the foot of the first rapid, 6 miles above Mr. Nichol's place, and lunched. The making of a fire

was a slow process, but George cut down a dead spruce, split up a portion of it, and with a handful of birch bark as a starter, finally had a blaze. The rain continued to come down in a steady drizzle, and our lunch was a dreary affair. After an hour's rest, Seaman and I walked around the rapids and the boys pushed the canoes bravely through them. At the head of this rapid we went aboard and from there to the next we had 3 miles of comparatively still water, or as the natives term it, "another stidy."

The Humber river forks about 4 miles above Mr. Nichols' farm, and the bit of still water from there to the first rapid was originally called "Willow stidy," on account of the clumps of willows growing along the banks. Gradually this name was applied to the entire left branch of the Humber, which is navigable for canoes a distance of 70 miles above the fork. The term is entirely wrong, however, for this is much the larger and more important arm of the Humber and should be known as the West branch.

Beginning 3 miles above where we landed there is a rapid 3 miles long, in the course of which the river makes a horse-shoe bend. Seaman and I portaged ourselves across this and met the men at the



UP THE HUMBER RIVER.

head of it, we having tramped only about a mile.

Then we had another "stidy" of a mile, and then about 3 miles more of rapids. We finally landed at our destination at about 4 o'clock in the afternoon. George and William had built a log camp there, covered with birch bark, which was a most welcome refuge from the rain. We soon had our tent up, and Frank and I lodged in that.



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COMING DOWN THE TRAIL.

Early the next morning, the 21st, we took the trail for the big marsh, which begins about a mile from where we camped, and extends some 10 miles up the river, with a width of 2 to 4 miles. Narrow strips of timber intersect the marsh, affording excellent cover for stalking game, and the entire tract is a favorite feeding ground for the caribou. When we emerged from the timber George climbed a tall spruce and took a survey of the country, but

failed to see any game. Then we separated, each of us being accompanied by one of the guides. George and I went about 2 miles up the marsh, on the right hand side, when he climbed another tree and scanning the ground carefully, as far as he could see, finally located a big stag lying down. When he pointed him out to me, I could see him from where I stood.

George descended and we made a long detour to get behind a strip of timber which would give us an easy approach. As we entered this grove another buck came round the point and we almost met him in the trail. We were within 30 yards of him when I saw him. He stopped and looked at me, as they always do before starting to run. I had ample time to kill him, but he had not a good head, so I let him go. Meantime, the buck we were after got up, crossed the strip of timber we were following, and went out on another section of the marsh. We followed him as fast as we could walk. He stopped occasionally to feed, but kept up a lively walk between nips. Meantime, he crossed another strip of timber, and as we traveled much faster than he did, we gained steadily on him. Finally we got within 200 yards of him, in the midst of an open tract of ground. I asked George if I would not better shoot from there.

"No," he said; "we will get close up."

Whenever the caribou stopped to take a bite of moss, we moved rapidly. When he raised his head to look around we stopped in a crouching posture. Finally we got within 100 yards, and I whispered to George that I thought I would better shoot.

"No," he said; "keep still; we will get on top of him in a few minutes."

Again the head went down and again we rushed forward. Again it raised, and again we crouched. At last we were within 50 yards of the big brute, and I do not believe George would have stopped then had I not hissed at him and raised my rifle. At that instant the old monarch, who was moving straight away from us, swung his head and looked back. I shall never forget the picture he made. He appeared almost wholly white, and was of impressive stature. His great, branching antlers reaching out from the base and approaching each other again at the tops, with his heavy brow tines dropping down over his face, were commanding and imposing. I aimed simply between his body and his head, and at the crack of the rifle the great beast went down with a broken neck.

Meantime, we had sighted several more caribou on different parts of the marsh, and started after them. I wanted heads of a doe and a fawn, to make a complete family, inasmuch as I have families, or pairs, of mountain sheep, elk, goats, etc. We left the big buck and made a bee line for a

small bunch of caribou about a mile away. We found it an easy matter to get within 50 yards of a cow and a calf, and 2 shots laid those out.

I then had all the game I wanted, and it was the work of but a few minutes to dress these 2, hang up their heads and skins and to go back and cut off the head of the big buck. The males are not good to eat at that time of the year, but we saved the meat of the doe and fawn.

In the afternoon Mr. Seaman and George started out together, and had walked but about 2 miles when George sighted a band of 47 caribou in a small park between 2 of the groves. George, by his skillful manœuvering, landed Mr. Seaman within 40 yards of this bunch, when the latter easily and rapidly killed his 3—2 bucks and a doe. This completed our day's work.

The law of Newfoundland allows each hunter who takes out a \$40 license to kill 3 caribou. If he takes a \$60 license he may kill 5, and on an \$80 license 7. We had no wish for more than 3, and made good use of these. The meat of the 2 cows and the calf was carried into camp, hung up there, and finally taken to the farm.

These Newfoundland marshes are a curiosity in nature. The country is underlaid with granite but a few feet below the surface, and decaying vegetation has formed peat beds over this, which are covered with moss, weeds and small shrubs. This entire formation is like a sponge and is full of water during at least 8 months of the year. Throughout the other 4 months it is frozen solid, and covered with 3 to 4 feet of snow. The surface is broken into what are known as bogs and "mashes," or soft, miry spots. In many places you sink to your knees and in others to your waist, unless you select the knobs to walk on. This traveling is exceedingly tedious and laborious to a tenderfoot; yet our guides would on occasion run across these marshes as fast as a caribou could trot.

There are water holes at frequent intervals on the marshes, some of which seem to have no bottom. They vary in size from 6 feet to 50 feet in width, some of them being round, and others oblong. The banks or walls are abrupt, and the water as clear as crystal; yet we could see no bottom. I had no line with me, but am sure some of them must be at least 50 feet deep. I should like to know the result of a geological survey of that country, and have written to the official geologist at St. Johns, asking if any such has been made.

This marsh is, I am told, only a counterpart of many that are found elsewhere on the island, some of them larger than this one. Between these marshes are ranges of hills or mountains, rising at some points to



PROSPECTING FOR GAME.

2,000 feet in height. These are also of granite formation, and there are big bogs

or swamps on their sides, and even on their summits. In other portions they are covered with hard clay or exposed rock, so that the traveling is easy.

Newfoundland is one of the greatest countries in the world for sportsmen. If a man wants caribou he can get them more easily there than anywhere else on the earth. In fact, the hunting is too easy to afford genuine sport. It is like going into a New England pasture and killing cows. The poor brutes are so stupid that though they may see you when half a mile away, they will allow you to approach within a few yards before taking to flight. The hunting is simply a matter of collecting specimens, and not of genuine, exciting sport. A band of these Newfoundland caribou is one of the most beautiful sights I have ever seen. On an average at least one-half the body of each animal is white, and the rest light gray; so that a band of them together presents a rarely brilliant spectacle. They are entirely different from the American species of either woodland or barren ground caribou.

There is little other game on the island. I was surprised at the almost total absence of bird life in the portions of the country we traversed. We did not see a grouse of any kind, and the only water fowl we saw on the Humber were perhaps 3 or 4 fish ducks, of various kinds. The guides tell me a few water fowl breed in various portions of Newfoundland, but that they are never plentiful, and those that summer on the Humber leave early in the fall.

Ptarmigan and one or 2 other species of grouse are said to be plentiful in the hills, but are never found in the lowlands.

For the angler, Newfoundland is one of the most delightful countries in the world. Almost every stream on the island is abundantly supplied with both salmon and trout, and many good sized streams have rarely or never been fished. None of these waters are preserved, and a man can simply get all the fish he may want. The trout range up to 7 pounds, and the salmon to 30 pounds. Here are records of a few catches made last summer:

General Dashwood, of the British army, 360 salmon in one week. That is at least 10 times as many as any man should take in that length of time, but it shows what a fish hog can do in Newfoundland.

J. Y. Pesant, of Halifax, also took over 300 in one week in '98 and 70 in one week in '99. Beverly Chichester, of Philadelphia, and Charles Fox, of Richmond, Va., each took over 20 in one week.

George Nicolls, who guided these men, tells me either of them could have taken 200 to 300 in the same time; but they quit each day when they got enough. This shows the difference between a reasonable sportsman and a butcher.

A man can go to Newfoundland on the first of September and have 15 days of salmon fishing before the close of the season. Then he can have 15 days of open season on caribou, though the chances are 10 to one he will get all he wants, or all he should kill, in one day—as we did. The

salmon season extends from June 1st to September 15th, and while the fish take the fly better in July and August than they do in September, yet the black flies also take the angler's blood more extravagantly during the summer months. They and the mosquitoes practically disappear entirely by September 1st, so that from that time you may fish in comfort, as well as in water.

I know of no place on the continent where a man may spend a month with greater certainty of getting good fishing and hunting at the same time, and with more chance of getting his money's worth 10 times over, than in the Humber river country of Newfoundland.

The best way to reach that country is by the route we took. You can go direct from New York or Boston to Halifax, or to St. Johns by steamer, if you wish; but it takes more time to



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TWO OF A KIND.

reach the island. Then, in order to get on to the West coast where we were, you would have to travel 500 miles by rail from St. Johns. This trip would be interesting, as you would be passing through a weird and picturesque country—almost an unbroken wilderness from start to finish—but when a keen sportsman is going after game he wants to get there as quickly as possible.

A good plan would be to buy your ticket via North Sidney to St. Johns, with stop over privileges; then you could stop at

Deer lake, do your hunting and fishing, and at the close of your programme, you could return home via St. Johns and one of the steamship lines, either to Boston or to New York. Thus you would have seen the island almost from one end to the other; you would have seen a large portion of Quebec and Nova Scotia, including the quaint and beautiful island of Cape Breton.

It only remains for American sportsmen to become familiar with the opportunities offered in Newfoundland. As soon as they realize the grand opportunities that await them there, thousands of them will go every summer. It is sad to contemplate that this will mean the wiping out of the great herds of caribou; but we shall have to submit to that as we have to the extermination of the buffalo, and the threatened extinction of the antelope, and the elk of this country.

On the other hand, it is doubtful if fishing there will be seriously injured in 100 years. As yet there are no dams on any of the rivers emptying into the ocean on

the West coast of Newfoundland; so that the trout and salmon can have free and easy access from the sea. The food is so abundant in these streams and there are so many thousands of miles of them that 5,000 men may fish there every summer and find almost as many fish the next summer as if no one had ever wet a line in these waters.

I regret to say it is difficult to get a fine caribou head in Newfoundland now. I mean one of the great heads with 50 or more points. The many hunters who have been going there for years past have been watching for these old bucks, and many a man has allowed a thousand animals to pass him within easy range without firing a shot, because no fine heads showed up. Hereafter hunters must be content with heads of, say, 25 to 30 or 40 points. The one I got has 32, and I consider myself mightily lucky. The 3 heads have been mounted, and are now on exhibition in my office, and I should be glad to show them to all who may call on me.

HE, SHE AND IT.

EILEEN E. SYME.

Oh, those days of the reign of fragrant
cigars,
The solace and joy of a bachelor's hours,
They seemed of his life the best lived part;
No woman had power to enter his heart—
Those bachelor days of champagne and wit,
Those smoke-wreathed days of just *he*
and *it*!

But a woman's hair bound him captive at
last;
The days of the fragrant brown queen were
past;
His old love he sold for the price of a kiss;
His old love, renounced for that moment of
bliss,
Now sleeps in its box, 'tis quite easy to see,
That these are the moments of just *he* and
she!

But love has its day, and time always brings
A return of the man to material things;
He's vaguely put out at the bitter strife
'Twixt the fragrant weed and his sweet-
faced wife;
But woe to the woman if she have not the
wit
To accept the alliance of *he*, *she* and *it*!

A BIBLICAL BEAR STORY.

Senator Pettus, of Alabama, recently told this one in a speech on the Puerto Rican bill: "An old minister in Alabama said, 'Brethren my text to-day will be this: 'Seven sons did Milcah bear unto Enon.' Now I expect, brethren, if you would look at the commentaries you would find various meanings to this text; but, taking a common sense view of it, I will say this: I expect Enon was sick, and the doctor told his 7 sons, great, strong fellows, that it was absolutely necessary their father have milk for his nutriment; and thereupon the 7 sons went out to look for the cows. The cows had not come up the night before, and so the sons could not find them, but they came across a bear, and they milked her and carried the milk to Enon. And so, brethren, it is writ, Seven sons did milk a bear unto Enon."

Mr. E. Conomy—What do you mean by buying all these things.

Mrs. E. Conomy—Don't get excited, dear; I didn't buy them. I had them charged.—Philadelphia Record.

Now I lay me down to sleep,
On a mountain mighty steep,
If I should roll before I wake,
I pray the Lord my neck won't break.
—M. H. W.



A 265-POUNDER ON THE MOON RIVER, MUSKOKA LAKES DISTRICT.

BY COURTESY OF THE GRAND TRUNK RAILWAY.

THE FISH WE USED TO CATCH.

JOE LINCOLN.

Oh, brothers of mine in the gentle art,
Whose dearest prize is a well filled creel,
Who know the thrill of the angler's heart
When the lithe rod whips to the whirring
reel;
A song I sing and a rhyme I bring;
Not of the pools where the salmon hatch,
But a memory fond of the village pond,
And the common fish that we used to
catch.

The fish we caught in the golden haze
Of the boyhood summers long ago,
When our bare feet tripped through the
grassy ways
To the nook where the lilies used to
grow;
Where the sunbeams played through the
willow's shade,
And danced as the soft breeze shook the
tree,
And the sound we heard was the song of
bird,
Or the drowsy hum of the bumble bee.

The fish we caught with the home made
poles
Our jack knives cut from the slender
birch,
And oh! the glory that filled our souls
With each new shiner or wee red perch;
And when our fun, like the day, was done,
And we heard the chorus the crickets
sing,
We'd idly roam, through the twilight,
home,
Where mother waited to praise our
string.

Oh, brother anglers, we've fought it out,
By ocean's surges or mountain glen,
With lordly tarpon or gamy trout,
Full many a time and oft since then;
But the days of old were the days of gold,
And never again that sport we'll match;
The care free joy of the happy boy,
And the common fish that we used to
catch.

THE NORTHWESTERN SKUNK, *MEPHITIS SPISSIGRADA*.

ALLAN BROOKS.

This is one of the largest of the Western skunks, which differs from those found in the Eastern States in its much larger size, the different pattern of the coloration of the tail and the formation of the tail. That in the Eastern skunks tapers to a point, but in the skunks of the prairies and mountains it increases in bushiness to the end, which is square.

Skunks eat great numbers of grasshoppers; in fact, when those are to be had they live on them almost entirely, but in the spring they are very destructive to the

usual gait is a curious one, the imprints of the 4 paws being in a line, and equidistant from one another, the row of tracks running diagonally to the course of the animal.

These large skunks seldom frequent heavy timber, except when following the course of a large river during the salmon run. I have noticed them at high elevations. In the Selkirk mountains I saw their signs above 6,000 feet, where, like the grizzlies, they were digging up ground squirrels.

On the coast during the salmon run they



THE NORTHWESTERN SKUNK. *MEPHITIS SPISSIGRADA*. (BANGS.)

nests of all birds that breed on or near the ground. They will cover 4 to 8 miles in their nightly peregrinations, carefully working all likely places for nests and coveys of young birds. During the fall and winter they subsist almost entirely on field mice, being too clumsy to capture game; but that will not balance the harm they do in the breeding season.

In spite of their strength they seldom pull out of a fairly strong trap, and do not seem so much addicted to eating off the trapped paw as minks and smaller skunks are. They often curl up and apparently go to sleep after being caught.

The track of a skunk when going at its

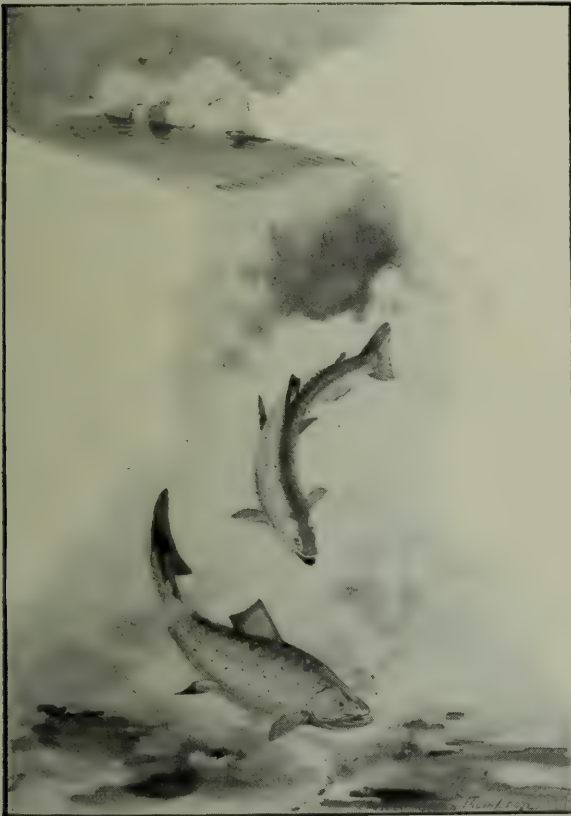
resort to the rivers, hauling the fish up into the log jams through the night and gorging themselves through the day. They then get very fat, the ordinary weight of an adult then being 10 to 16 pounds.

In old individuals the white on the back and tail becomes strongly tinged with yellow, sometimes turning to a uniform tawny color. The fur in young animals is good, especially early in the season, even in August; but old ones are coarse and woolly. The markings of large skunks in British Columbia are regular, and I never saw any but the ordinary type of coloration as represented in the drawing.

A JUNE MORNING ON A TROUT BROOK.

H. A. SCOTT, M. D.

The warm June sun is breaking through the misty tree tops; the balmy South wind, perfume laden, blows softly into my face, as I pause to eat my lunch, beside the clear, rippling creek. Out on the marsh I hear the merry "bob-o-link, bob-o-link," and the musical whistle of the red winged blackbird. Off across the meadow a thrush has awaited the rising sun, and as its gilded rays diffuse themselves among the budding branches he breaks forth in his matin song of praise, filling the air with melody. On the brook the haze still hovers, and through it I hear the merry leaping of the trout. A sudden



SOME OF THE OLD FELLOWS.

breeze loops up the gauzy curtain, and I catch a gleam of rubies, as the sun glints on their sides, or a flash of diamonds, as they plunge back, and the spray falls, in countless beads, on the surface.

Since the earliest grey tinge of dawn my arm has been busy. As I empty my creel and almost reverently lay the 14 beauties—warriors, every one of them—side by side on their jewel studded armor. I feel I am entitled to my bite of bread and cheese, washed down with copious draughts of the clear, cold water rippling and eddying at

my feet. As I lie there, a tree toad chir-rups in a tree hard by, while a red squirrel, from a neighboring branch, chatters saucily a moment; then, with a whisk of his tail, scampers noisily out of sight.

For a time I lie there, listening and enjoying, more than tongue can tell, the old familiar sounds; but at last a high sun warns me to be on my way. Carefully wrapping my trout in moist grass, I replace them in the creel, and once more step into the brook, to follow its pebbly pathway back to the bridge. Cautiously I work my way along until I reach a certain sunken log, about which the water surges and roars, in that extravagant manner common to small but irascible bodies. This log is an old acquaintance of mine, and I know there lurks beneath it another old acquaintance, who, I am sure, knows me quite as well as I know him. Many and many an hour have I spent in a vain endeavor to coax that old trout into my basket. He will rise easily enough. Indeed, he loves to take the fly in mid-air, but his control is perfect, always. I can usually tell just where he will take the fly, which way he will go with it, and from which particular root I shall have to disengage the hook later. This knowledge does me no good, however, for I seem powerless to prevent it; so I always reel up and turn homeward, vowing I'll never try him again. Of course I know I will, the next time I am out. I know life would lose half its zest were it not for those little battles with that old trout; but I always feel better for the swear-off. It makes the next contest more exciting.

Someway I feel, to-day, that fortune is with me, and I stand a moment watching the old log, in the hope of seeing my friend, for the last time, on his favorite battleground. He is there, I am sure, so I select his favorite hackle and carefully drop it in the most tempting position I can reach. No result. A second cast, and he dashes out, with the evident determination of taking line, reel and all. After the usual preliminary skirmish in open water he darts, with the speed of an arrow, for the old water-logged roots. I have, however, chosen an entirely new position, and can, at last, block that move. My confidence increases as his frantic leaps and vicious lunges fail. Carefully and successfully I parry them all, and slowly but surely I gain over him, though at times my heart sinks below water level, in fear that I have lost him.

Now he reels and gives ground, and I can even see his pink belly uppermost, for an instant; but he is away again, and fighting gallantly, almost before I realize he is down. At length he, the hero of a hundred hard fought battles, the victor of many a carefully planned campaign, lies at my mercy, held captive by a cobweb bit of silk. I gloat, but with discretion, for I too clearly realize his capabilities. Carefully reeling him in, I loose the landing net and prepare for his reception. As I lean forward he makes a last desperate plunge for freedom, and I, stepping at the

same time on a rolling stone, lose my balance and sink on one knee. Without waiting to rise I bring the butt to bear; but it is useless. I knew it before I tried. The old crusader is back again, under the log, doubtless taking his rub-down.

As I sadly unjoint and start down the bypath to the old country road, along whose borders the arbutus and sweet velvet-hearts intermingle with maiden-hair and wintergreen, my spirit chafes less and less bitterly over its defeat, until I say to myself that some day, perhaps, in the far future, I may try him again.

A SPRING TIME IDYL.

A. L. VERMILYA.

Johnny gets his pole of cedar,
Gets some angle worms and fishhooks,
Gets a pocketful of crackers,
Speeds away across the meadow
To the river in the woodland,
There to catch the festive sucker,
Pumpkinseed, or any other
Giddy little fish that's longing
To forsake the crystal water,
To get out, and view the landscape.

What to Johnny are mosquitos?
What the brambles, thorns and nettles?
What though his bare legs are smarting
From the sunburn and the scratches,
And the rag is lost from off the
Toe he stubbed on yester evening?
He is fishing, fishing, fishing,
All the world is right before him,
All its glory and its grandeur
Center on the winding river,
Where the willows nod and flutter
And the bull-frogs boom and bellow.

Let the gilded city sportsman
With his fancy rod and tackle,
Landing net and creel of canvas,
Play a six-inch trout a half-hour
Or a quarter longer, may be,
Ere he scoops it from the water;
He can never know the pleasure,
Never know the exultation
That thrills all of Johnny's being,
As he yanks a perch or sunfish
Out upon the bank beside him;
Hooks it on his willow stringer
With his other finny prizes.

Slowly rolls the sun in grandeur
On its journey to the zenith,
Then toward the far horizon
Downward glides in softened glory
To'rd the West, the magic Westland;
And as o'er the hills and tree tops
Softly fades its light and lustre,
Slowly melts the orb in splendor,
In the purple clouds of sunset.

Then, as o'er the hills and valleys,
Through the woods and down the river,
Steal the dusky shades of evening,
Like the ghosts of days departed,
Like the ghosts of vanished summers,
Johnny slowly trudges homeward,
Tired and hungry, but more happy
Than a lordling of the manor;
For he carries on a stringer,
On a pliant willow stringer,
Perch and sunfish, bass and suckers
And such other giddy fishes
As, dissatisfied with water,
Longed to gaze upon the landscape;
While his pockets bulge with treasures,
Little turtles, shells and pebbles;
Treasures dear to boys like Johnny,
In the days of sunny childhood.

And his father smiles serenely
On our youthful Izaak Walton;
Looks the laddie's fishes over
Says, and saying beams with pleasure,
"Bless the boy! he's like his father!
Loves the river and the wildwood,
And the balmy days of springtime.
He will be a loyal sportsman,
Yes, a noble hearted sportsman;
Loving all the works of Nature,
All her glory and her grandeur."



AMATEUR PHOTO BY A. H. VERRILL.

WHITE THROATED SPARROW.

Highly Commended in RECREATION's 4th Annual Photo Competition.



AMATEUR PHOTO BY H. T. WHITMORE.

NEST OF RUFFED GROUSE.

Highly Commended in RECREATION's 4th Annual Photo Competition. Made with Korona Long Focus Camera.



ANOTHER SPECIMEN OF BRISTLE BACK.

You will see his trade-mark on the barrel shown in the picture. Yet, lest you forget it, I repeat it here. It is ROBERT B. DOUGLAS, and he lives at Stanwood, Wash. It appears from a careful examination of the picture and of the note on the back of it, that he killed 45 ducks and 3 geese in one day. But what could you expect of a man who wears a face like that?

He—Statistics show the American Indian is gradually but slowly becoming civilized.

She—Dear me; I hope they won't all get civilized before I can afford to buy a Navajo blanket.—Detroit Free Press.

A CRUISE BEYOND SUNDAY.

HARRY M. EVANS.

I have been a lover of gun and rod as long as I can remember, dating back to the days when clouds of wild pigeons darkened the sky during their morning and evening flights. I used to run away from school and follow a market hunter day after day through the beech woods of Hardin county, Ohio, to carry the game and get licked at night when I went home. I was a proud boy when I got my first gun—an old army musket. It would make more noise, kick harder and kill less than any other gun in the world, but I loved it while it lasted.

In 1879 failing health sent me to the Western plains and mountains. I spent 2 years roaming with experienced companions in that land of game. I have also hunted and fished in Canada and Northern Michigan.

In 1885 I was permanently injured while hunting in Pennsylvania. Since then I can not tramp the woods, and now indulge only in such sport as fishing or shooting from a boat or blind. I also practice taxidermy for pleasure and in order to have a collection of my own.

Reduced, as I have said, to boat shooting, and seeking a new field, I determined to spend the winter of '94 in Florida and add some new birds to my collection. I went to St. Andrews bay, on the Northwest coast, on January 1st, chartered a sloop and outfitted a party of 6. We cruised the various arms of St. Andrews bay, Crooked Island sound and St. Joseph bay. Black bass were abundant in the fresh water lakes, and sea trout and sheepshead in the bay and bayous. There were deer and turkeys in the woods ashore. St. Joseph bay was a fine place for gathering shells, and I brought home several barrels.

This first winter's sport was so delightful that I spent 3 winters there. I decided to cruise the entire West coast of Florida, and in 1896 had a boat built at St. Andrews expressly for the cruise and outfitted there. Our boat was only 27 feet long, all cabin, and jigger rigged; made for safety rather than speed. The trip is long and dangerous, but a most delightful one. None but experienced sailors should attempt it. We had many narrow escapes from wreck, and once nearly starved.

On that occasion I indulged in a pot shot which under other circumstances might have classed me as a game hog. At Hunter's pass, a few miles below Tampa bay, we were held 4 days by a fearful storm

which made it impossible to move. We were out of provisions and could not restock until we reached Tampa. On the evening of the 4th day the wind died out entirely. I was sitting on the cabin gazing over the water, when suddenly I saw a buck walk out on the beach. He was about 300 yards away and evidently had not seen us. All was excitement on board; we were hungry and wanted meat. Four of us dropped into the skiff and pulled ashore in a little cove out of sight of the deer. Two went ashore to stalk the game, while the mate and I pulled back up the beach in the opposite direction. We rowed in among the numerous little mangrove islands, and stopped under some overhanging boughs, waiting for a shot at ducks. None came within range, however, and we were on the point of returning when a whizzing sound overhead caused me to look up. There, about 40 yards away, was a perfect cloud of shore snipe settling on a bar. I was hungry and desperate, and regardless of sporting ethics, I cut loose with a single charge of No. 6's. When the flock left we picked up 73 snipe. I was a little ashamed of this, but the other boys did not get the deer, and so no one reproached me for the slaughter.

The mate and I had congratulated ourselves as we rowed back, that we could have a big feast on Sunday, which we were almost certain was next day. We were to have fried snipe for breakfast, potpie for dinner, and cold snipe for supper. When we tossed the pile of snipe on deck we laid our Sunday programme before the crew.

Captain Hand asked, "When is Sunday?"

Grizzly Hank said he thought it was day before yesterday. Sam was certain it was day after to-morrow. Pilot Billy Dutton said he didn't remember having seen a Sunday for 2 weeks. We at last decided to ask the captain of a boat lying near by. When we propounded our question the old fellow looked first at his watch and then at the sun. Then he said:

"Well, I'm a stranger in these parts and hardly feel safe in saying. It's my impression, though, that this is Sunday, for my mate shifted his shirt to-day for the first time this change o' moon."

So we had to do without a Sunday until we got to Tampa; but we decided, unanimously, that any day was good enough for eating snipe.

PURE AMERICAN BLOOD.

LIEUT. C. F. O'KEEFE, U. S. V.

"Where are you hit, my good man?" inquired the field surgeon. "Just remain quiet till I see. Steward, cut his shirt open in front. Oh! a Mauser. No Remington bullet went in here. Where did it come out? Must be behind. No, don't turn him over. Let him rest as he is. Now, young man, put your arms around my neck and hold on till I raise you up.

"Oh!" said the field surgeon, frowning; "here it is, away down here." As he raised the wounded boy to a sitting position it was seen that the canvas stretcher on which he lay was filled with blood. It was swaying to and fro, and the breeze sent little ripples over it, as over the surface of a river or lake. Then it occurred to me that a few small holes should be in these stretchers, so a wounded man would not have to lie and soak in his own blood.

"He says he wants an injection of morphine, doctor," said the steward.

"All right, my boy," said the surgeon, who leaned back so the boy could not see him. Then he shook his head at the steward and pointed to the great pool of blood.

"I'll fix you in a second." And he

placed his chloroform flask to the boy's nostrils.

"Now, steward, lay him down again. Put those leggins under his head, for a pillow. Get his record and tie on the tag. How do you feel—better now, don't you?"

The boy shook his head with a sad smile and said in a weak voice,

"Oh, that's all right, Doc; I see my finish. Say, Idaho, put my hat over my face. The sun hurts my eyes."

The surgeon shook his head, and as he turned away, said, "Steward, why don't they bring in the others?"

"We haven't any more stretchers, sir, unless we lay some of these wounded on the ground."

"All right," replied the surgeon; "lay some of those men over there on the ground, in the shade. Don't disturb this one," pointing to the boy with the hat over his face.

A few minutes later the surgeon said, "Steward, close that boy's eyes and put a bandage 'round the jaws till they set. Lay the body on the ground and send that stretcher out with the others. The ambulance will be here in a minute."



PHOTO BY LIEUT. C. F. O'KEEFE, MANILA, P. I.
HEAD OF WATER BUFFALO.

Into her hard, unyielding heart
A little spark of love there came!
He blew himself, and, lo!

The spark was made a flame!

—Detroit Journal.

We've the ice now, and we're ready for
the mint;

The campaign mule is braying at the
gate;

The yellow perch are biting in the Flint,
And the liars of the land are digging
bait!

—Atlanta Constitution.

"Yes," said the sentimental Filipino,
"there's nothing more pleasant than a syl-
van retreat."

"I'm glad you like the idea," answered
the general. "We take to the woods again
to-morrow."—Washington Star.

UNCLE JOHN'S STORY.

S. D.

"You recollect as how I went up to the Carcajou club last fall?" asked Uncle John. "Well, this hincident as I am about to relate, happened then.

"If yer after a reel old ripsnorter of a time, there's the place to git it," he resumed, in his drawling way. "Them chaps up at Carcajou are a mighty rum lot, and things is prettv swift where they be, I tell ye! There was the Governor who made toddies, an amazin' humorous man. Reel pleasant and nateral, too. Quite like ordinary folks in spite of his governmentin' capacity and superior mental frills. Then ther was the Governor's boy, who had a keen understandin' of the elevatedness hincidental to being a Governor's son, and the Ginerl, and a Senator's son or 2, an author and an inspirin' Methedist preacher. Likewise a smatterin' of more ordinary lawyers, doctors and newspaper men as looked out fer the peace and welfare of this yer establishment.

"I mustn't forgit to enumerate him thet was assistant cook under me as was head chef of this yer premises. Eli Perkins his name was, and the curiusest cuss I ever seed. This yer Perkins and me hed no feelin's of adorin' fer each other. He was thet dad-blasted obstinate thet he wanted his own way allus.

"But to return to my storv, which is about the Ginerl, with particelars:

"The Ginerl is pretty old, nigh onto 70, I reckon, and not quite so spry or so quick to handle a gun as he used to be. But once a sportsman, allus a sportsman, you know; the same bein' the Ginerl's predicerment.

"The day on which this episode occurred was a low-down blusterin' one. I recollect that right well as I spent a good share of it in a blind, where I had plenty of oppertunity fer observin' of the same. Gray sky overhead, tumblin' water below, a drizzlin' slant o' rain betwix, with ther wind a-moanin' through the rushes and the birds flyin' in bunches, like bits of black ragged cloud. It was jest the kind of weather fer good shootin', as ye knows.

"It bein' the etiquette of Carcajou, the shooters lit out fer the blinds directly breakfast was over, takin' a cold lunch in their pockets, an' they never showed up agin until dark. Then they come a-troopin' home, sportin' of ther corpulent game-bags, joshin' each other most unmerciful an' as hungry as wolves. At 7 sharp me and Eli served grub. And they kep a-eatin' of the same as long as ther was any fer to eat.

"Long about 4 o'clock on the day I described to yees, havin' bagged 17 ducks with 5 canvasback to head the list, I piked out fer the 'ouse to put the ducks ter roast, peel the taters and mix the 'yonny,' Eli bein' that shiftless I dasn't trust him fer doin' of even this the way it orter to done.

"These perliminaries 'tended to, I went outdoor to view the adomesphere. Among other things I remarked a boat comin' round a pint of rushes about a quarter mile down shore. As I said, the wind was blowin' right smart out ther and the hoc-cupant seemed considerable embarrassed by its attentions. So what with the gentle breezes and the merry waters he got com-mingled with the rushes to that extent thet he couldn't git out again.

"After several minutes of frantic manœu-verin' with the oars, he riz up to pole himself out of the scrape. Howsomever it happened, he made a miscue and took a somerset overboard. Then after raisin' waterspouts and churnin' the lake into soapsuds fer a spell, he settled down peaceful like.

"When the foam'n vapors parted I see him calm and collected as usual, standin' on the bottom of the lake, with the waves a-beatin' up agin his manly breast. He got into his boat agin along of some extraordinary gymnastics, and come navi-gatin' along at a snail's pace. When he had nearly reached the dock he leaned out over the side of the boat to ketch a stake to steady himself with in landin'. That was another fool move, fer he clean missed the stake and his arms, head and shoulders went kerchunk inter 2 foot o' water, leavin' his hindquarters still aboard the boat. Then I couldn't help but laugh, a-watchin' of his contortions. Whenever he would try to insinerate the first half of himself inter the boat thet contrairious craft would slide farther out into the lake like some new-fangled stern-wheeler. After walkin' backward on his hands fer a rod or so he come to anchor and lay stock still, half aboard and half in the water, a deliberatin' of the siteration. He didn't seem to think it worth while to play propeller any more, fer he quietly wriggled his latter end over into the lake." And Uncle John guffawed uproariously at the recollection.

"Wal, I started fer the dock, tryin' to compose my visage as I went along. I didn't want to hurt his feelin's, you know, and they were likely to be techy jest then. So I tried to look unconcerned, and ses I.

in an off-hand, nateral tone, 'Pretty sloppy day, ain't it?'

"The Ginerl was settin' down with his back toward me when I made the precedin' remarks. He edged round in the water and ses he, solemn and mournful like, "'Tis sorter wet, Unc' John.'

"I set down sudden like as a faint feelin' came over me with palpitatin' emotions in the regions of the stumik. I heard the Ginerl behind me splashin' round as he pulled his boat up to the dock. He was talkin' low like to himself, an' his remarks

was earnest but contaminatin. Then, as if he had rid himself of an unpleasant duty, he riz up spry and chipper like.

"'John,' ses he, in a voice entirely out of keepin' with his forlorn, drippin' appearance, 'don't tell the boys about this—er—it would only worry them. Doc would prescribe for rheumatiz and pack me off home, an' I might jest as well fee you as him.'

"He spoke most beseechin', with an allurin twinkle in his peepers hard to resist. The Ginerl's a foxy bird, thet's what he is!"

WHAT'S THE MATTER WITH THE PUP?

I enclose you herewith a proof, not only of a negative, but of the truth of the old adage that nature looks out for its own.

When, about a week ago, I saw the pup he had short legs. Since then a blizzard has brought us 2 feet of snow, and now see the pup equipped with legs that would enable him to wade snow banks or play he was a stork.



Of course, the camera didn't do it, for it is credited with being a good one, and I take it that a camera is like a man and could never maintain a good reputation when given to exaggeration. Hence

it must be a proof of the truth of the old adage and that some of the other animals beside man are "fearfully and wonderfully made."

But, seriously, can you advise me as to what happened to the camera, or to the subject at the instant of exposure?

C. L. Bailey, Mancelona, Mich.

ANSWER.

Your lens has simply distorted the image. It is difficult to say why, but probably because the lens was made for landscape work and not for making portraits of puppies or of people. As to why the lens should have lengthened the dog up and down, instead of sidewise, I am unable to say, but no doubt it was built that way.—EDITOR.



AMATEUR PHOTO BY I. S. TROSTLER.

NEST OF GRASSHOPPER SPARROW.

Highly Commended in RECREATION'S 4th Annual Photo Competition.

THE RACE HORSE CASE.

Extract from the Speech of ex-Governor W. A. Richards, at the Annual Dinner of the L. A. S.

In the summer of 1895 the State of Wyoming achieved an unenviable notoriety on account of an attempt to prohibit the wanton destruction of game by Indians. The severe adverse comments made on the action of the State authorities by the press of the Eastern States was due largely to a misapprehension of the facts. It is with a view to correcting these erroneous opinions, even at this late date, that I avail myself of the invitation to say a few words concerning the Indian troubles in Wyoming that year and the case of John Ward vs. Race Horse, in the determination of which the Supreme Court of the United States effectually settled the controversy.

For several years preceding the time of this trouble there had been friction between the State authorities and the Indians in regard to the killing of game. While a Territory, the officers were unable to enforce the game laws against the Indians by reason of the provision in the act creating the Territory of Wyoming to the effect that nothing in said act should be construed to impair the rights of person or property then pertaining to the Indians in said territory as long as such rights should remain unextinguished by treaty between the United States and such Indians.

When in 1890 Wyoming was admitted to the Union of States its officers believed they had authority to enforce the statutes of the State in respect to fish and game, as well against Indians as against white people. Their attempts to do this, however, met with poor success for the reason that the Indians were informed by those having them in charge that they had a right to hunt on any vacant public land. Numerous arrests of Indians were made for violation of the game laws, small fines were imposed, which were generally paid either by themselves or by their agents, and the depredations were continued. In July, 1894, the celebrated Sioux chief, Red Cloud, together with his son, Jack Red Cloud, a chief named Dreaming Bear, and several other Indians were arrested in Natrona county for killing antelope. On their promise to abstain from any further depredations of this character their fine was remitted and they were released; but in a short time they were again arrested for a similar offense, and this time were imprisoned until their fine was paid.

During the campaign of 1894, preceding my election as Governor, I heard a great many complaints of the wanton destruction of game by the Indians, and prom-

ised to do what I could to remedy this evil. In accordance with my recommendation to the Legislature of 1895, a game law was enacted which, in addition to limiting the killing of game to the months of September, October and November, also limited the quantity which might be taken to that which might be needed for immediate use, and required that any non-resident desiring to hunt within the State should first obtain a license, for which he would be required to pay the sum of \$20. That was the first time in Wyoming that a license had been required, and it was intended principally to prevent the hunting in that State by Indians from the adjoining States. In June of the same year, having been informed that Indians from Idaho were wantonly killing game in large numbers simply for their hides, I reported the matter at considerable length to the Secretary of the Interior with the request that instructions be issued prohibiting Indians from hunting in Wyoming in violation of its game laws. I presume this letter was properly referred to somebody, but I know the action requested was not taken, or if any orders were issued to that effect they were not complied with.

The Indians continued to flock into Wyoming from Idaho, with passes from the agent at Fort Hall. On receiving reports from the officers of that portion of Uinta county generally known as Jackson's Hole, to the effect that the Indians absolutely ignored the law and defied the law officers, I instructed them to cause the arrest of any Indians who might be found committing the depredations complained of. Several parties were arrested, tried before a justice of the peace, and nominal fines imposed, which were remitted. That only led the Indians to think they could not be punished for their unlawful acts, and made them bolder and more insolent.

Finally the trouble culminated when the arrest was attempted of a party of 16 Indians, who were killing elk indiscriminately and in large numbers for their hides alone, leaving the carcasses to rot. The evidences of this wanton destruction were to be found in many places. When the constable attempted to arrest this band he was forcibly resisted and run out of the camp and out of that part of the country at the muzzles of half a dozen Winchesters. Not being inclined to surrender the entire country to the Indians he raised a posse of about 20 men, went back and arrested the entire party. On the way to the office of the justice of the peace at Marys-

vale, now called Jackson, the Indians, at a preconcerted signal, attempted to escape from the officers, and in the confusion which followed one Indian was killed and one wounded. This wounded buck subsequently recovered. The one who was killed in attempting to escape from the officers by whom he had been legally arrested comprised the sum total of the casualties resulting from this Indian war, which was denounced by the press of the East as a great butchery of defenseless Indians.

On July 16th I received a telegram from Market Lake, Idaho, the station nearest the scene of the trouble, signed by the officers and several citizens, informing me of this event; that many Indians were in that vicinity who threatened the lives and property of settlers, who were moving their families away and asking for assistance. This telegram I immediately repeated to the Secretary of the Interior, whose attention was also called to my letter of June 17th, which related to the causes which had resulted in this deplorable condition.

By the first train Adjutant General Stitzer of Wyoming started for Market Lake with instructions to go to the scene of the trouble, get reliable information and report to me as soon as possible. General Stitzer performed his duty promptly and reported to me that the situation was serious; that many Indians were leaving Fort Hall to join those already in the mountains; that Indians from other reservations were joining them, and that the settlers were preparing to remove their women and children out of Jackson's Hole. All information received from this source was at once transmitted to the Secretary of the Interior.

On July 23d, 7 days after the outbreak, I wired the Honorable Secretary, asking whether the Federal Government would take in hand the matter of returning the Bannocks to their reservation or whether Wyoming would be expected to do so. To this I received a prompt reply to the effect that the Secretary of War had ordered Brigadier-General Coppinger to proceed at once to the scene of trouble and to order such movements of troops as might be necessary to prevent a conflict between the Indians and settlers.

This action by the Government was taken none too soon, as I had received information on July 24th that the settlers, 120 in number, well armed and supplied with 1,000 rounds of ammunition to the man, proposed to leave their stockade on a given day and themselves attempt to drive the Indians from their vicinity in order that they might take care of their crops, which were going to destruction. Had the people done this a very serious

conflict would have resulted. While this body of men was well calculated to cope with a much larger number of Indians, they did not know, as I did, that there were at least 800 armed Indians in the immediate vicinity of Jackson's Hole.

On receipt of this information I immediately instructed General Stitzer at Market Lake to inform the people of Jackson's Hole that troops were en route to returned to their respective reservations, and for them to do nothing except on the defensive.

On receipt of this order a courier was dispatched from Market Lake, who rode the distance to Marysville, 130 miles, in 24 hours, and delivered it to the settlers just in time to stop them from going out to fight the Indians. The settlers had their horses saddled and would have been gone in an hour, and the result would have been a serious matter.

On the arrival of the troops under General Coppinger the Indians dispersed and returned to their respective reservations, and the "Indian war" in Jackson's Hole was ended.

While it had amounted to but little in the way of an Indian war, it had furnished the opportunity for some of the biggest fights on paper that the Western country has afforded. Special correspondents without number accompanied the troops. It was necessary that their papers should receive news of a startling character, and they generally got it. The Governor of the State came in for his share of notice, not only through the newspapers, but also through personal communications from missionary and Indian rights societies and other philanthropic bodies. These communications were generally of a hysterical character, protesting against the slaughter of defenseless Indians shot down in their tracks simply for hunting game in their own country. Occasionally the Governor was encouraged by the receipt of telegrams of approval, one of which I distinctly remember coming from this city of New York, which stated that prompt and decisive action on the part of the Executive such as would result in the extermination of the Bannocks would be appreciated by the best people of the community.

At the beginning of this trouble with the Bannocks the United States Attorney for Wyoming called my attention to the treaty of 1868 made with that tribe, in which it was provided that "they shall have the right to hunt on the unoccupied land of the United States as long as game may be found thereon and as long as peace subsists among the whites and Indians on the borders of the Indian districts," claiming that under this treaty the Indians had a right to hunt in Wyoming regardless of

any statutory regulations. To this I replied that I did not feel I was called on to construe a treaty, but that I was required to enforce the laws of the State of Wyoming, and that I purposed doing so; that I could not conceive that an Indian from a reservation situated in another State could have rights within the State of Wyoming which were denied to its own white citizens; and that, at all events, I should continue to enforce the laws against the wanton destruction of game by all persons, regardless of color or nationality.

This position brought the State into conflict with the Federal Government, and some time after the return of the troops from Jackson's Hole negotiations were begun looking to a judicial determination of the disputed question. A special agent of the Indian Department came to Wyoming and proposed a test case in the Federal courts. To this I readily assented, as all the State had done had been in conformity with law in an attempt to enforce our State statutes. In this conference with the representative of the Government he was accompanied by the United States attorney for Wyoming and by Brigadier-General Coppinger, and Colonel, now Brigadier-General Randall. The Attorney-General of Wyoming being absent from the capital, I called in as my legal adviser Judge Willis Van Devanter, the present Assistant United States Attorney-General for the Interior Department. Having thus become associated with the case at its inception, Judge Van Devanter, at my solicitation, continued in the case until its final determination. Being an ardent sportsman, a successful hunter of big game and a consistent advocate of its protection, he took the laboring oar and devoted all his powers to the work in hand. To his able, intelligent and untiring efforts, seconded by Attorney-General B. F. Fowler, of Wyoming, we are indebted for the successful issue of this important and far-reaching case.

The test case was instituted by the arrest of a Bannock Indian named Race Horse, who admitted that he had killed 7 elk in Uinta county, Wyoming, on or about the first day of July, 1895. An application was made by the United States Attorney to the United States Circuit Court, District of Wyoming, for a writ of habeas corpus directed to John H. Ward, sheriff of Uinta county, in which it was claimed that the arrest and detention of Race Horse was in violation of the Constitution of the United States and in violation of Article 4 of the treaty made with the Bannock Indians at Fort Bridger in 1868; and thus was the case of Ward vs. Race Horse brought to the attention of the United States Circuit Court.

In the hearing in that court there was but little testimony introduced, the essential facts being admitted. The contention of the Government was that the provision in the treaty with the Bannocks that "they shall have the right to hunt on the unoccupied lands of the United States as long as game may be found thereon, and as long as peace subsists among the whites and Indians, on the borders of the hunting districts," gave them the right to hunt in Wyoming regardless of our game laws. This the State denied, and raised the following points in support of its position:

1. The place of the commission of the offense with which Race Horse was charged, and for which he was held in custody, was not "unoccupied lands of the United States" within the meaning of Article IV. of the treaty.

2. Game and fish, by the English common law, were the property of the crown, and in the States of the United States they are the property of the people of such States. The State may exclusively control their taking and capture, the same as it may control its other property.

3. Independent of the question of ownership, the preservation of game and fish is within the proper domain of the police power of the States and the hunting privilege granted to the Indians by the treaty is subject to the exercise of that power.

4. The Wyoming law regulating the taking and killing of game, enacted under the police power of the State, is not a regulation of commerce with the Indian tribes.

5. The United States has recognized and acquiesced in that construction of the treaty which makes the hunting privileges for the Indians subject to regulation and control under the police power.

6. Indians within the limits of a State and off from their own reservation are subject to the jurisdiction of the State and amenable to its laws.

7. New States, when admitted into the Union, are so admitted on an equal footing with the original States and become possessed of all the authority, powers and attributes of sovereignty possessed by the original States. On their admission, all legislation by Congress enacted solely through the exercise of the power of Congress to control the Territories, is repealed and abrogated as to such new States.

8. A treaty and a law of Congress are on the same footing. Neither has superiority over the other, and both are subordinate to the Constitution. Treaty provisions are repealed by subsequent inconsistent Congressional legislation. The repeal may be either by implication or it may be expressed. The Act of Congress admitting Wyoming into the Union, on an equal footing with the original States, is inconsistent with the Indian treaty and

therefore reveals it to the extent of such inconsistency.

The points chiefly relied on by the State were that the original States had the power to control and regulate the taking of game; that when Wyoming was admitted to the Union "on an equal footing with the original States in all respects whatever" it became vested with the same power in that as in all other respects, and that a treaty may supersede a prior act of Congress and an act of Congress supersede a prior treaty. The other points were supplemental to and in support of this superstructure on which rested our case.

On the conclusion of the hearing we felt we had won our case, and were therefore greatly disappointed when an adverse decision was rendered. We had cited many cases wherein the Supreme Court had held that a treaty had been repealed by implication by an act of Congress, but the court based its opinion on 2 cases where it had been held that the State could not tax Indian property because of a treaty exempting it. In that connection the court said:

"The power to levy and collect taxes is undoubtedly a power which a State may properly exercise, as is also the authority to regulate the taking of game under the police power. Both are unquestionably sovereign powers possessed by the States, and, as it seems to me, stand on an equal footing. Certainly the exercise of the police power is not superior to the power to collect taxes, for the very existence of the State government depends on its power to provide a revenue by taxation for the purpose of maintaining the State government; yet it was held by the Supreme Court in the case of the New York Indians—5 Wallace, 761—that a law passed by the State of New York which provided for taxing certain Indian lands was void because in conflict with the terms and provisions of a treaty exempting those lands from taxation, entered into between the United States and the Seneca Indians. See also case of Kansas Indians, 5 Wallace, 737:

"While it is true Kansas accepted her admission into the Union on condition that the Indian rights should remain unimpaired, and that the General Government might make any regulation respecting them, their lands, property or rights which it might have been competent to make if Kansas had not been admitted into the Union, yet, I think, the case following in the same volume of the New York Indians shows clearly that in the absence of such a provision as that contained in the act admitting Kansas the judgment would necessarily have been the same. Both cases turn on the question of the conflict

between the State law and the provisions of a treaty."

Those two cases caused a decision against us. The reasoning is plausible, too, as is often the case when an argument is based on a false premise. But those cases and the Race Horse case are not analogous. In the latter we contended that when Wyoming was admitted on an equality with the original States there was no reservation of her rights implied or otherwise; that one of those rights was the possession of the game within her borders, to which not even her own citizens had any claim except as granted by the sovereign power, while in the cases cited and relied on by the court, one, that of the Kansas Indians, differed from our case in that the power to tax those Indians was expressly excluded in the enabling act under which the State was admitted; while that of the New York Indians involved the right of the State to tax land embraced in an Indian reservation which existed prior to the adoption of the Constitution of the United States. Thus those 2 cases involved the authority of the State to exert its taxing power on lands embraced within an Indian reservation within its jurisdiction, while the Race Horse case involved a question of whether, where no reservation exists, a State can be stripped by implication and deduction of an essential attribute of its governmental existence.

This decision caused all the batteries of the hostile press to be again turned on Wyoming and its officers. The siege guns, the rapid-fire guns and the pop guns all took a shot at us, but instead of retreating we made an advance under fire and a last stand on Capitol Kopje in Washington. We appealed the case to the grandest tribunal on earth, the Supreme Court of the United States. The case attracted considerable attention in official circles. The War Department, the Interior Department, and the Department of Justice were all interested in it, and Attorney-General Harmon appeared personally for the Government. Arguments on behalf of the State were made by Judge Van Devanter and Attorney-General Fowler. With little delay an opinion was handed down sustaining the State on every essential point for which it had contended. But 8 judges heard the argument, 7 of whom concurred in the opinion, while one mildly dissented. This decision may be found in 163 U. S., 504, under the title of Ward vs. Race Horse. The court held that the power of a State to control and regulate the taking of game can not be questioned; that the treaty of 1868 was intended to provide a home for the Indian, which was done by giving him a reservation on which settlers can not en-

croach; that the privilege to hunt on adjacent territory was given him as long as the necessities of civilization did not require otherwise; that the authority of Congress to abridge this hunting right was made manifest when in 1872 the Yellowstone Park was carved out of this hunting district and hunting within its boundaries prohibited. The court specifically says that "the whole argument of the defendant in error rests on the assumption that there was a perpetual right conveyed by the treaty when in fact the privilege given was temporary and precarious."

The decision of the Supreme Court fully vindicated the State, but was criticised somewhat because it was claimed in some quarters that the Indians had always thought they had this right. That is true, and it is also apparent from the vigor with which Race Horse was defended that a good many white people held the same opinion. It was erroneous, however, and, as a last word, I will quote the concluding paragraph of the opinion:

"Doubtless the rule that treaties should be so construed as to uphold the sanctity of the public faith ought not to be departed from. But that salutary rule should not be made an instrument for violating the public faith by distorting the words of a treaty, in order to imply that it conveyed rights wholly inconsistent with its language and in conflict with an act of Congress, and destructive of the rights of one of the States."

This, in brief, is the history of the pro-

ceedings by which it was determined that Indians have not a right to hunt within a State in violation of its game laws, notwithstanding a treaty which gives them the privilege of hunting on unoccupied lands of the United States. It was a question never raised before it was brought up in the Race Horse case. We had no precedents to follow, but fought the case to a successful conclusion on the general principles of equity, humanity and common sense, which won, as they should win, in all cases.

The effect of the decision was far-reaching. Colorado and many other of the Western States accessible to the Indians at once availed themselves of it to protect their game from the wanton and wasteful slaughter to which it had been for years subjected. The effect of the restriction of hunting by Indians in Wyoming was at once noticeable in the increase of young on the ranges, theretofore kept down by the ruthless slaughter of the females and their unborn young in the early months of the spring.

The only damage resulting from the incident was to the reputation of the State officials who brought the question to an issue, and they have all survived. While they regret that even one Indian should have lost his life, and that they should have incurred the censure of the all-powerful Eastern press, they feel they were but doing their duty, and that time and the logic of events will vindicate their course; and they are satisfied with the result.

WHY IS A COW?

His 5-year-old boy was perched on his knee, and the fond father gazed at him with eyes that beamed with paternal pride.

"Papa"—pointing out of the window—"what are those men doing over there?"

"Building a house, my son."

"Why?"

"Because they are paid to do it."

"Who pays them for doing it?"

"The man who is putting the house up."

"What does he pay 'em for?"

"For building the house."

"Why?"

"Because—well, because they would not build the house if he did not pay them."

"What does the man want the house for?"

The paternal smile became rigid,

"To live in."

"Hasn't he got a house to live in?"

"Oh, yes."

"What does he want another one for?"

"Oh, for other people to live in."

"What other people?"

"Oh, men and women and little boys and girls."

"Why do they want to live in the house?"

"Well, they must live somewhere."

"Who?"

"The people."

"What people?"

"Any people."

"Why?"

At this juncture the innocent, prattling child saw a firm hand descending, and hastily retreated in time to prevent a collision.—Tit-Bits,

A VILE PEST.

W. H. NELSON.

The spring has come; the leaves are out
On maples, elms and willows,
And hills and vales in verdure dressed
Roll wide in emerald billows.
I listen for the robin's song,
But—oh, my soul it harrows—
I catch the noisy clatter of
The cussed English sparrows.

Wee Jenny Wren, whose cozy nest
Once perched beside my gable,
Is gone, and in her stead are these
Scavengers of the stable.
No more the bluebird cleaves the air,
A sapphire-pointed arrow;
But in his stead I grieve to see
The cussed English sparrow.

The catbird, which once poured his song
In raptures at the dawning,
Is silent, but I hear instead
This devil scold all morning.
Her mark is on the balcony,
In garden seat and barrow,
The foulest termagant of earth—
The cussed English sparrow.

I hate the monster in the egg,
The father and the mother,
Grandsire and grandam, d——n 'em all!
Say I, and any other
Such importation. Curse his crop,
His gizzard, bones and marrow.
May every egg rot ere 'tis laid!
Dod dang the English sparrow.

A mother sent her small boy into the country, and after a week of anxiety received this letter: I got here all right but forgot to write before. A feller and I went out in a boat and the boat tipped over and a man got me out. I was so full of water I didn't know anything for a good time. The other boy has to be burried after they find him. His mother came and cried all the time. A horse kicked me over and I have got to have some money for fixin' my head. We are going to set an old barn on fire to-night and I should smile if we don't have some bully fun. I shall bring home a tame woodchuck if I can get 'm in my trunk,

"Where are you going, my pretty maid?"
Old Neptune to the mermaid said.
She combed the seaweed from her hair
And said, "I'm off to Sir Eel's lair
And when I rob him of his shirt
I'll make myself a new eel skirt."
—Chicago News.

Blinkers—I understand there was a fire at your place yesterday?
Binin—Yes; right in my quarters.
Blinkers—Much damage?
Binin—No; only to me. The boss put me out himself.—Philadelphia North American,

FROM THE GAME FIELDS.

PREDATORY BEASTS IN YELLOWSTONE PARK.

WILLIAM S. BRACKET.

I have read with much interest in the January number of *RECREATION* the article on Bear in Yellowstone Park, written by my friend, Frank A. Johnson, of Chicago, who is the hunter, par excellence, of big game among all the amateurs of my acquaintance.

From an experience of over 12 years in and around Yellowstone Park, permit me to say a few words in response to Mr. Johnson's article.

The natural winter habitat of big game, such as elk, deer and antelope, is not in the valleys and meadows of the Park. In early times the game passed down from the high volcanic plateau, now known as Yellowstone Park, at the first storm of winter. They went down the valley of the Yellowstone river, and down the valleys of the 5 other great rivers which find their sources in or near the Park, and wintered on the lower and warmer levels far to the East and South. Civilization has driven and hemmed the big game in the Park and compelled it to winter there, for there alone is the big game of our country protected and preserved.

It is hard at best for the herds of elk and deer, and the few buffaloes left, to winter in the Park, but of necessity they must winter there or perish. They have no other winter home secure from the attacks of man. The mean elevation of the Park is between 7,000 and 8,000 feet. The winter snows are deep, and it is pitiable to see the great herds of elk over on the East fork of the Yellowstone, weak and nearly starved, struggling through the winter and early spring. Of course, great care is taken to prevent any poachers from killing or disturbing these elk or any other big game in the Park, for here is their last and final resort for protection against those ruthless human monsters, who, if unchecked, would soon exterminate all the elk and deer in America, as the buffaloes have already been exterminated.

But far more terrible and destructive to the big game of the Park in winter and early spring than a whole regiment of poachers, or other game hogs, is the constantly increasing army of bears, cougars, lynxes and timber wolves, which now infest the Park, and which, by the most awful of blunders, are equally protected from being molested by man, with the innocent elk, deer and buffaloes. Thousands of elk calves, fawns and buffalo calves fall victims in the early spring of every year to the vast numbers of predatory bears, grey wolves,

cougars and lynxes which follow up the starved and weak herds, and easily capture and kill the young animals. The elk cows and the buffalo cows are too weak to protect their young, and the deep snows of early spring in this, their unnatural winter habitat, prevent escape. Unless some remedy is applied to this awful state of affairs we shall soon have no big game left in Yellowstone Park. Game preservation which does not preserve is a farce.

Mr. Johnson is only one of a hundred witnesses who can testify to the boldness of bears in the Park. Wolves, cougars and lynxes are even bolder and more savage in their attacks on the helpless herds of elk, deer and buffaloes, which are more than half starved in the secluded and remote valleys of the Park in winter.

RECREATION is the champion of game protection. Let your widely read magazine take up this crusade for the protection and preservation of our big game in the only reservation in the United States where it is supposed to have protection, but really does not get it.

I am sure Capt. Brown, 1st U. S. Cavalry, the present efficient Superintendent of Yellowstone Park, is alive to the necessity of killing off all predatory animals in the Park at once. But he can only make recommendations. He cannot act alone. Unless public opinion is aroused and sportsmen all over the country soon take action, the big herds of elk, deer and antelope, and the little herd of buffaloes in Yellowstone Park, will be gone.

The old-timers of the Upper Yellowstone and the hunters and ranchmen of all that region will tell you that what I say in this article is the literal truth. Al Pfohl, who accompanied Mr. Johnson through the Park and shared in the strange experiences with the bears, narrated by Mr. Johnson, knows this is so. Mr. Pfohl is a good guide and hunter, whom I have known many years on the Upper Yellowstone. La Fontaine Black, a veteran hunter, of Montana, and Mr. Pfohl were talking with me about this very matter last November, and deploring the fact that the Government should allow the predatory animals of the Park to slaughter the elk and deer in winter and spring as they are now doing.

Yellowstone Park in winter and early spring has become a paradise for wolves, bears, cougars and other predatory beasts. They come from all directions for hundreds of miles, to feast and fatten on the elk and deer. By a strange fatuity, the carnivorous beasts are protected as they

carry on the slaughter. The remedy for this state of affairs is for the government to license about 40 professional hunters to go into the Park and kill off all carnivorous wild beasts every winter and spring. These men could report to the Superintendent and be under his orders and direction.

It is probable these men would engage in such a service for the skins thus obtained without further pay. They are just as much concerned in game protection in the Park as anybody. They make their living by taking parties of amateurs into the mountains to hunt. If the elk and deer are exterminated their occupation will be gone, for no man is permitted by law to sell wild meat in Montana or Wyoming, and there is, in fact, little or no wild meat sold now.

If the game in the Yellowstone Park is really preserved it will furnish for many generations excellent hunting in the mountain area round about the Park by the overflow of game during the open season coming out beyond the Park limits. The good hunting in Jackson's Hole will keep good 50 years by reason of the overflow from the Park preserves. But if the wolves, bears, cougars and lynxes which are now so carefully protected in their wholesale slaughter in the Park are not checked, there will be no big game there in a few years.

A LAW-BREAKER CONVERTED.

Indianapolis, Ind.

Editor RECREATION:

General Lew Wallace, who lives at Crawfordsville, recently acquired a small tract of ground, consisting of some timber along a narrow ravine, with some good springs in the ravine. He purposes to place a dam at the lower end of the ravine, make a fish pond and raise 2 or 3 kinds of game fishes. He also purposes to enclose the timber part with a wire netting and watch the growth and habits of quails and other game birds. He has a small steam launch on the Kankakee, and goes there often to fish and shoot ducks.

We are beginning to enforce the game laws in this State. Only recently several game dealers were fined for having quails in their possession out of season. One case was bitterly contested before the criminal court of this county. The defense was that the law was unconstitutional because it interfered with interstate commerce. The game dealer had bought quails in Chicago, had brought them here and put them on the market. The court held, however, that the defense was not a good one and imposed a fine.

We have a deputy game warden in this State who is doing a great deal of good.

He is a perfectly fearless fellow, and has accomplished much with the small fund at his disposal. He told me recently he destroyed 2 seines, one 500 and the other 600 feet long. He told me an interesting experience he had one Sunday last summer. He was driving along a highway in the Northern part of the State, some 200 miles from his home, when he passed a farm house and noticed that the farmer had a net strung up in his barn, mending it. He jumped out of the buggy and ran to the barn, but before he got there the farmer closed the door and would not let him in the barn. The deputy told the farmer his name, business and that he wanted the net. The farmer sent his son to the house for a shot gun, perhaps 2 guns, one for the son and one for the farmer. The deputy argued with them a long time, but to no avail. Finally the deputy returned to the men in the buggy and told them to drive 4 miles to the office of a justice of the peace, for a search warrant and a constable. He would remain to watch the farmer and see that he did not hide the net. Finally the warrant came, and with it 2 armed constables. They surrounded the farmer and captured the whole outfit, net and all. The farmer was tried before a justice and fined. He appealed to the circuit court. The case was tried and the jury disagreed. It was tried again before a jury with a verdict of conviction. The whole business cost the farmer \$240, and he had to mortgage 40 acres of land to get the money. He became one of the best friends the warden has, and there are no more violations of the law in that community.

Some friends of mine have recently been in the Kankakee marshes shooting ducks. It is said that Sunday, March 24, there were 3,000 Chicago hunters on the Kankakee marshes. They were present in droves everywhere, shooting at everything and making enough racket to frighten away all the game within a score of miles. In Illinois license fee is required for hunting. Here we have nothing of the kind and are imposed on. Another session of our Legislature will not pass without an earnest effort being made to secure relief from such imposition.

Mr. Earle, the deputy game warden of whom I have spoken, recently told me he wanted to take up the question of pollution of streams and see if he couldn't stop many of the abuses that are going on. There are a great many strawboard mills in Indiana which dump their refuse into the streams, thereby killing thousands of fish and preventing others from coming. There is a mill about 20 miles above this city, but they have been perpetually enjoined from polluting the stream, and they

now dump their refuse into a large field, around which an embankment has been thrown. That field is about full, and we may expect the levee to be cut some night, as was once done, and all that lime and other chemicals to go tearing down the stream, killing everything for miles.

I have recently read with much pleasure your "Camping and Camp Outfits" and your "Cruisings in the Cascades."

Frank L. Littleton.

HUNTING PHILIPPINOS.

Iloilo, Panay, Philippine Islands.

Editor RECREATION:

Your magazine has caught up with me away out here, and has received a hearty welcome. I have been much interested in your crusade against the game hogs, and have been thinking it might be well to ship a few of them out here on trial. We could give them exciting hunts and would place no limit on their killing. But they may not fancy the game, as it shoots back occasionally. The game is *ladrones* (robbers), and they are found in covens of 10 to 200. We get the best sport and the most game by hunting at night, and I assure you the sport affords quite enough excitement to satisfy the desires of the most ravenous game hog. Our battles of November, particularly the battles of Jaro and of Pavia, fought by our second and third battalions November 21st, broke up, scattered and satisfied the genuine insurrectos of Panay. I wish you could have seen our brave young Americans rushing the trenches that day. It was grand. But we lost some fine boys there. Those battles and our subsequent swarming over the island caused all honest, fair minded insurrectos to retire to their homes and begin the reconstruction business. The riff raff, however, having no homes, and no desire to work, organized into robber bands, and have since been amusing themselves by robbing, murdering and burning out, not U. S. soldiers, but defenseless natives. To meet this condition we have broken up the 1st Separate Brigade, 8th Army Corps, into small one company garrisons, holding towns everywhere. From those we send out small hunting parties to destroy *ladrones*. Until we became well acquainted with the country we were obliged to hunt by daylight, meeting with poor success; but recently our work has been down by night, resulting in some large bags. In fact, since our lads have developed into genuine game hogs at this sport it beats potting turkeys by moonlight, and we place no restrictions on the sport.

I am afraid this island will never become a sportsman's paradise. There are plenty of snipe, a few curlews, and a few

measly little quails about half the size of the Bob White. I have seen them only on the wing, so can not describe them accurately. They appear to be dark in color, and I found them only in the mountains. We are not using any shot guns now so we get none of this small game. I have not seen a duck since I came here, nor have I seen a wild animal of any kind, though I have heard there are deer on neighboring islands.

I have just been reading RECREATION for January and trying to cool myself by meditating over "A Beginning on Quails," where our friend was troubled by the cold November wind. Will you please send over some of that wind with the game hogs? We need something cold.

Accept hearty congratulations on the continued prosperity of RECREATION. I remember you had hopes when I found you and the infant cuddled together in one corner of an office in the shadow of Brooklyn Bridge. That was some years ago; but how that infant has grown!

C. B. Hardin,

Captain 18th U. S. Infantry.

NEBRASKA WILL IMPROVE.

It is useless to work for game protection here. The people are not in sympathy with the idea, and do not care whether there is any game protection or not. There has been much obnoxious legislation here on the game question, which has disgusted and antagonized every man who owns a gun. The game laws are not enforced, nor can they be, apparently. When there is any prosecution it is only a case of spite work and bad blood, where some fellow has it in for an enemy. This is true all over the State as far as I know. At any rate, there is not enough game left here to quarrel about. Rabbits are, of course, considered a nuisance here. There are a few quails, still fewer prairie chickens and the spring and fall flights of ducks and geese. All told, there are not enough birds to pay for going out with a gun. We have a game warden in Idaho, and I have yet to hear of one effort on his part to protect game or punish those who infringe on the game laws. People kill game just the same and wink the other eye. They call it mutton, veal, turkey or any other old thing. If a man is arrested he can not be convicted, as he has the sympathy of the judge, every man on the jury, and the public. There are a few people who respect the laws, but the majority will not. How are you going to make the general public take up a thing they don't want, don't like, and all kick against? I've been studying this matter 20 years and never have solved it yet. The game has been steadily decreasing, and the next generation will have to content themselves with

shooting at clay pigeons or a target unless they are millionaires and can own a game preserve. I have had my share of good shooting and enough. I shall seldom use a gun again. I can get as much pleasure in looking at game as in shooting it. One thing is sure; nothing can be done around here as to working up the League of American Sportsmen. If there was any hope of doing anything I would help you all I could, but the boys will not support the effort. The song birds and others are, I believe, generally well protected here, though the English sparrows have nearly driven them out of the country, and that is an evil for which there is no known remedy. The public schools are doing good work for protection of the birds by teaching children to protect and not molest them.

M. W. Miner, York, Neb.

ANSWER.

This is indeed a deplorable state of affairs, but fortunately it does not prevail everywhere, not even all over Nebraska. The League has a few members in that State, and the number is growing slowly. Those who have joined are, of course, the more progressive men, and Mr. Miner is one of them. The time will come when many of the residents of that State will awaken to the interest of game protection. They will then join the League and help us. It may be too late, of course, to save the prairie chickens from extermination, but it may still be possible to save a few coveys of quails for seed, and to aid in the preservation of migratory water fowls. It is a pity that so called sportsmen should ever lapse into such a deplorable state of innocuous desuetude as Mr. Miner portrays. Possibly the good Lord may send a cyclone of reform through that State some day that will wake up some of those pothunters.—EDITOR.

IMPORTING QUAILS.

I was speaking to a club man a few days ago of his game preserve 5 miles out from Pittsburg, Pa. He says that 20 sportsmen from Pittsburg have bought the gunning privilege of 4,000 acres of farm land near Pittsburg and are trying to stock the place with quails from the South and West, but so far they have met with poor success, although they have put out over 1,000 pairs each year for several years. Last year they imported 2,400 quails from Kansas. They pay \$3.50 to \$6 a dozen for the live birds. It seems a shame that these birds are taken from a climate in which they can live and thrive and are transported to a cold, severe climate, where the winters are almost certain death to them. —

My friend also says many thousands of trapped birds are shipped North and East each year, and that the reason the charges for them are so high is that the shippers run a risk of being caught, as they are violating the laws of Kansas. Can't something be done to check this wholesale slaughter of quails in the South and West?

W. L. Harris, Virginia Beach, Va.

ANSWER.

I fail to see anything like slaughter in the shipment of quails from one State to another for propagating purposes. Of course, the birds are distributed for the purpose of being killed eventually, but in some of the localities where they are liberated there are laws in existence protecting them for a series of years; while in Kansas there is no such law. It is a well known fact that farmers and farmers' boys in that State, as well as in others where quails are plentiful, trap them persistently and constantly. When they get them, they sell them for any price they can get. If no one else bought and shipped them, the local grocers would buy them, and either kill and ship them to game dealers, or they would be sold and eaten in the town where such grocers live. The L. A. S. is doing everything possible to stop the killing and shipping of game in close season, but, personally, I approve of the plan of restocking areas of country where the game has been killed off. I wish all the thousands of quails that are annually killed in Kansas, Texas, Oklahoma and the Indian Territory and shipped to game dealers in Chicago and other cities could, instead, be shipped alive to other States and liberated. A live bird in the field is worth 100 dead birds in a game dealer's refrigerator.

As far as I know, most of the birds shipped from Kansas, in the spring or summer, and set at liberty in Pennsylvania, New England and other Northern States, thrive and multiply. Of course there is a marked difference in the climate, but they seem to adjust themselves to this as the winter comes on, and I have never heard of any serious loss from freezing of these imported quails.—EDITOR.

IN THE TEN SLEEP COUNTRY.

Manchester, N. H.

Editor RECREATION:

Arriving at Ten Sleep in June, 1896, after 165 miles in a prairie schooner, sleeping on the ground during the trip, a soft bed was welcome. The bed was found at Milo Burke's. Such a greeting as we received from Burke really made us think we had met an old schoolmate.

In a short time our trip to the mountains was arranged, and preparations made

for a start next day. We had traveled from the Atlantic coast, sightseeing, and this was looked forward to as the climax to our trip.

Next morning Burke and one man, my companion and I, started with 4 saddle and 3 pack horses. The route led up a canyon 1,500 to 2,000 feet deep with a silvery stream flowing through it. On our way we passed the Gilla Lee monument at the mouth of Lee creek, where a Mr. Lee, member of the English Parliament, was killed by falling about 1,800 feet while hunting mountain sheep.

The tents were pitched early for our first camp. Then we rode out a little distance, and saw a number of deer, feeding in a ravine. Such funny looking things to me; such ears and such a queer gait! One would think they were a lot of rheumatic mules instead of deer. They were mule-deer and that was my introduction to them.

On our way the following forenoon a lone antelope was seen, and as we were in want of meat a bullet was sent through his head. We also ran across 2 rattlesnakes, which we deprived of their rattle-boxes.

We reached our destination that afternoon, on the shore of Ten Sleep lake, away up in the mountains. There we fished or rode 8 or 10 miles from camp nearly every day; prospected for gold, basked in the sun and loitered away a few days in the pure air and in seeing some of nature's wonders. It was not only pleasant, but invigorating. We saw a number of elk and deer, and the sight of them would start a thrill and send the blood coursing at a double-quick pace. Then, too, the adventures over rocks, ledges and mountain tops; sliding the horses down the sides of ledges and scaling banks almost perpendicular, were experiences entirely new to one who had led a quiet life in the East. They contained just enough danger to make them attractive.

In a few days there was a cry for more meat, so we paired and started out, Burke and I hunting together. He said we could easily kill a deer in 2 hours. A doe was seen when about a mile from camp. We dismounted and ran toward her. Soon a buck came into sight, stopped and looked at us. We both knelt and fired. The buck ran about 15 rods and fell. Only half an hour had passed since leaving camp.

With a good deal of grunting and hard lifting we got the buck on the horse, and returned. Our friends had seen a few deer, but failed to get a shot.

After another day we struck camp and returned to the ranch, having enjoyed to the fullest the few days in the mountains.

Dr. D. S. Adams.

GAME HOG BETZ.

In May, '99, RECREATION I commented on the conduct of "Commodore" Betz, - Philadelphia brewer, who, with a party of friends, had just then returned from a shooting trip in Pamlico sound, with the rigging of their yacht strung full of game they had killed. They sailed into Philadelphia with this disgusting exhibition, and had themselves, their yacht and their victims photographed.

In November last they repeated this exploit, and again disgraced themselves by posing the whole outfit in front of a camera. The Philadelphia papers, as usual, gave a lot of space to grandiloquent announcements of the return of these swine, and many clippings from these papers were sent me. Here are a few of the expressions of disgust that accompanied them:

I send you to-day a clipping from the North American, which tells a sickening story of the exploits of brewer Betz and his fellow swine. The more we read and the more details come out of this disgraceful slaughter the more indignant all decent, respectable men become. I do not know of any more disgusting exhibition than is shown and boasted of by the members of this party. I will with pleasure join the L. A. S. and send you check herewith for my membership fee. I am in hearty accord with what you are doing and hope you will give it straight and fair to the brutes who made this disgraceful exhibition. Spare the hog! He is a noble animal in comparison with the men connected with this slaughter.

P. H. R., Philadelphia, Pa.

Please find enclosed clipping from North American of December 14th, 1899. It designates the class to which Betz, the brewer's son, and his followers belong. One of the party, Glosser, says canvasbacks are seldom seen. If we were all such as he there would be no ducks or other game at all. It is a pity these people could not have been lost in a fog. Then game would be more plentiful for those who can only get a day off now and then.

R. A. F., Philadelphia, Pa.

I enclose a picture and an account of some of our Philadelphia swine. You know how to take care of these people, and I need only say I hope to see their names in a future number of RECREATION.

Betz's address is 1400 Girard avenue, Philadelphia. If you do air these fellows please send Betz a marked copy.

E. W. Barnes, Philadelphia, Pa.

Enclosed you will find a clipping from the Evening Bulletin telling about brewer Betz and some other game hogs. Please give them a good roasting, as they deserve it.

A. W. W., Philadelphia, Pa.

I enclose you herewith 2 clippings from as many Philadelphia newspapers for your consideration. I am totally disgusted with this sort of "sport," and something radical should be done to stop it. It is not the first time these men have engaged in this kind of slaughter, as you will see by reading the articles enclosed. I hope you will give them the roasting they deserve.

B. C. C.

IN DEFENSE OF CORMIER.

Ottawa, March 14th, 1900.

Editor RECREATION:

There appeared in your March issue a letter from "W. A. W.," "The Fallacies of Cormier's Kippewa," which, to my mind, not only does Mr. Cormier a great injustice, but also does a great injustice to one of the best hunting grounds of Canada. I have had the pleasure of taking several trips for moose in the country of which "W. A. W." writes so disparagingly, and while all of my trips have not been successful, it does not seem a just cause for condemning the entire country.

Three years ago I killed in the month of November 2 moose near there; 2 years ago, while I hunted as hard as usual, I did not see one; last year I went in exactly the same place W. A. W. refers to. Our party went in the last of September, and remained 3 weeks. October 5th Dr. Kidd of Ottawa, killed a fine bull moose, and October 8th another, which measured across the antlers 58 inches. Another member of the party, Mr. C. N. Daly, of Guelph, killed on October 7th a black bear, and on the 10th a big moose. Both of those gentlemen saw several other moose.

It was not my good fortune to see one, but I don't think it the fault of the country or of myself that I did not. It was simply my luck. I went back again the first week in November, and killed 2 moose in 3 days' hunting, and could, had I wanted to be a game hog, and a law breaker, have killed 3 others. This hardly looks as though there was nothing there.

As to special permits to hunt out of season, I believe it is in the province of the Commissioner of Crown Lands of the Province of Quebec to issue such a license if he sees fit, and I presume without knowing positively, it was from that source the special permits came.

I am not intimately acquainted with Mr. Cormier, but have always found him gentlemanly, polite, and ready to do anything he could to help or make anybody's trip a successful one. I have had occasion to send to him, several times, American sportsmen. They have universally been well treated, and have been helped by Mr. Cormier very materially in getting their

game out, and their guns and tackle in without trouble or expense.

The charge that Mr. Cormier was getting a "rake off" on goods purchased is a serious one, both to Mr. Cormier and to reputable merchants of Ottawa, and one which perhaps might be a hard one to substantiate.

In conclusion I would say, I don't believe there's a better moose country in America than the district about the Kippewa, and I have yet to see anybody who has been badly treated by Canadian officials. It's possible the gentlemen did not have the best guides in the world, but we know every one can not have world beaters.

Charles E. Turner.

A CLERGYMAN ROASTS WOMEN WHO WEAR FEATHERS.

To a big congregation, composed mostly of women, the Rev. Dr. George Rutledge, of the Third Christian Church, Philadelphia, recently preached a sermon denouncing the practice of wearing birds' feathers on bonnets. The text was from the Song of Solomon, "The time of the singing of birds is come," and the congregation listened intently as the preacher told of the usefulness and beauty of song birds.

"I hope my words may pierce the hearts of my hearers," said Dr. Rutledge; "that they may appeal to conscience and mind. The condemnation of heaven is upon the reckless fashion and whim of women—this pandering to folly that calls for the destruction of the innocents.

"How lonely would be the forests and the woodlands without our feathered friends! How rich is their plumage! How cheerful is their song! But when they become the dead make-ups in fashion they are useless. As the war on the feathered tribes goes on the sunlight grows dull and the beauty of the flowers is lost in blushes of shame. The zephyrs play a dirge through the tree tops.

"As the war on the feathered tribe proceeds the argument that toads and lizards are capable of solving the insect problem becomes wondrously far fetched. Live birds in the open air are useful, but dead birds on hats are useless. A living bird is a moving jewel in Nature's labyrinth of beauty and sublimity. The bold contract, recently made, which calls for 20,000 dead birds from Delaware, is a deep stain on our boasted civilization that a century can not wipe out.

"I wish to raise the curtain on 2 acts in a popular drama. The first has been played, the second will be produced in the near future. Last week a mother bird was murdered. The young birds watched in vain for the return. They felt the pangs

of hunger and cried. Then they pined and died. Their little bodies are now decaying in their nest. On Easter Sunday that same mother bird will be seen by 500 pairs of eyes, many of them swimming in tears, not because a bird has been murdered, but because of what the ears will hear and the soul will feel. The dead bird will look down with glassy eyes over a face illumined with heavenly light, on a scroll held with consecrated hands, while a heart beats with religious fervor and an angel-touched tongue sends up an anthem of praise to God for the resurrection of Him who said, 'Blessed are the merciful, for they shall obtain mercy.'"

Here is a preacher after my own heart. He has been made an honorary member of the L. A. S. "Of such are the Kingdom of Heaven."—EDITOR.

DOCTOR HARRISON'S DENIAL.

New York City.

Editor RECREATION:

Some months ago you published an attack on me by Doctor Austin, who averred that S. F. Fullerton, late Chief Game Warden of Minnesota, had entered into collusion with me to violate the State game laws. In a subsequent article H. C. K., who gives his address as Duluth, makes an unwarranted attack on my friend, H. Y. Haigh. Austin has never met me or been within miles of my camp. His assertions were based on the statements of a loafer who proved a thief when working for me, and whom I discharged.

All the statements made by your 2 correspondents are absolutely untrue. I know Mr. Fullerton only casually and in his official capacity. I believe him an honorable man, who discharged the duties of his office conscientiously. Many extravagant stories about me reached his office. These were sent by market hunters and others who have some occasion to dislike me. Mr. Fullerton sent 4 game wardens to my camp, who came in the guise of gentlemen of leisure. I so regarded them and entertained them 2 weeks. They then informed me who they were and expressed their satisfaction at having found no tendency on my part, or the part of my men, to violate the laws. The party was headed by Mr. Payne, of Brainard, Minn. Prior to that I had not met Mr. Fullerton. When he was introduced to me he told me he wanted to see anyone, even though his brother, punished, who violated the game laws. I believe him, and regard the attack on him uncalled for and untrue.

As to Mr. Haigh, he is a lover of the woods. He would not kill any animal. I watched him 5 months, and although we saw more than 60 moose he never fired a shot. He would walk miles and undergo

any hardship to get a photograph of game.

I never at any time or place killed any animal not needed for food, and have many times gone hungry rather than kill a female. I never sold a pound of game at any time, and your correspondents told what they could, with brief inquiry, have learned to be false.

George E. Harrison.

AN APPEAL FROM MICHIGAN.

I'm after someone who will introduce into our next Legislature a bill prohibiting the sale of game at any and all seasons of the year. Prohibit the sale of game and game fishes in every State in the Union, and in less than 10 years there would be no use for further game or game fish laws. There would be few, if any, game hogs. The market hunter and the game dealer are the fellows who are exhausting our supply of game birds, deer and trout. The plumage dealer and fashionable women are close seconds in the destruction of our plumage birds. Let our law makers draft laws which will drive these fellows from the country or force them to engage in other pursuits for a livelihood, and your battle for the protection of game and bird life will be won. I'm not sure but that 5 years would give back to most States as many game birds and game fishes as most decent sportsmen could wish. Since Michigan prohibited the sale of trout in or out of season there has been a decided increase in all our waters. In this State the sale of some game birds is not lawful. That law is good as far as it goes, but it does not go far enough. What we want is unqualified prohibition at any and all times. We want and must have, before we can be entirely successful, the same laws in all States, especially those in which are located large cities, where cold storages are a help to the dealer, hotels and restaurants. Stop the traffic in game and you've knocked the keystone from the destroyers' arch. Let the public and RECREATION take care of the game hog. He will soon disappear if public sentiment is against him, and it will be; it is now, for that matter, thanks to Shields, RECREATION and their friends.

J. Elmer Pratt, Grand Rapids, Mich.

A REMARKABLE COLLECTION.

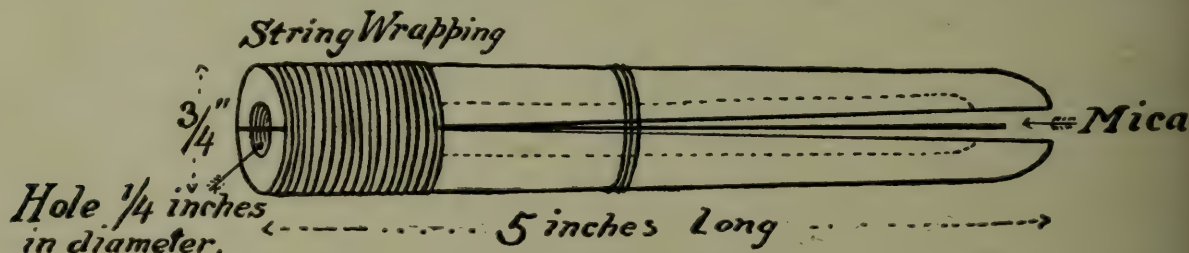
I have a collection of mounted heads, antlers and horns, valued at \$5,000, which is pronounced by sightseers the best selected collection in the United States. Any of your readers passing through Davenport are invited to call and see it, free of charge. The collection embraces 4 moose, one of 30 points, an arni head with horns, 9 feet 6 inches long from tip to tip; a kerabau, horns 19 inches around at base and 8 feet 2 inches long; an Asiatic sheep, horns 10 feet from

point to point, with a spread of 53 inches; African cattle horns 7 feet 3 inches; Roman cattle horns 8 feet 3 inches; Hungarian cattle horns 9 feet 10 inches; Texas cattle horns 8 feet 8 inches; rhinoceros horns 27 inches long, weighing $9\frac{1}{2}$ pounds; double rhinoceros horns weighing 11 pounds; a mastodon tusk weighing 102 pounds, 9 feet long and 18 inches around, perfectly sound; African elephant tusk 53 inches long, weighs 13 pounds; walrus tusk 34 inches long, weighs 7 pounds; hippopotamus tusks 2 feet long; narwhal tusks 6 feet long; 3-foot sword of swordfish; 5-foot saw of sawfish; the smallest deer antlers in the world, one inch long and 15-16 thick, $\frac{7}{8}$ inch long and 9-16 thick, $\frac{1}{8}$ inch long and 3-16 inch thick; specimens of American buffalo and bison, Indian, African and Asiatic buffalo; 5 elk; one extinct Irish elk; 9 caribou; 50 varieties of deer, from many countries; many freak horns and antlers; locked deer antlers; ibex of Arabia, Abyssinia, India and Switzerland; 30 kinds of African, European and American antelope; African wart hog, with tusks 17 inches long; making 170 pieces, which form an unusual private collection open to the public.

Dr. W. W. Palmer, Davenport, Iowa.

DUCK CALLS.

For the information of Mr. H. E. Scott, of Columbia, S. C., I want to state through your valuable magazine that he has a better duck call than any he can buy. This call consists of his lips and his right hand.



A PRACTICAL DUCK CALL.

Form a circular opening with the first finger and thumb by closing the first finger and coiling the thumb around it. Close the other 3 fingers partially, leaving a hollow opening in the hand. Press the lips tightly to the circular opening formed by the first finger and thumb and blow with a sputtering of the lips. The noise you make the first time you try the experiment will probably frighten you, and your wife may order you out of the house; but do not be discouraged. If you continue to practise until you find just the proper position for the fingers and the correct formation of the lips, you will make a duck call of yourself that will beat any metal call ever made. The experimenter must make the "quacks" himself by sudden spurts or splutters of the lips. A steady

blow through the hand in this position will not make a noise like the quacking of a duck. I was not the inventor of this call, and make no charge for giving instructions. All I ask is that Mr. Scott will be a patient student, and after a fair and unbiased trial write me of his success.

W. A. James, Pennington, Wis.

In reply to H. E. Scott, in RECREATION, as to where to get duck calls, I advise him to make his own out of 2 pieces of hard wood. Either cut or burn a small hole down the center and bevel off the ends. Then place in the center a piece of mica like that used in stoves. Wrap the end of the wood around tightly with string or wire. The mica makes a much more natural tone than brass does. It would look like this. Make two or three and pick out the best. Make it about 5 inches long, $\frac{3}{4}$ inches in diameter, inside hole $\frac{1}{4}$ inch in diameter. The dotted lines represent the shape of inside hole.

John Bownon, Hamilton, Ontario.

GAME NOTES.

Atlantic City, Jan. 22.—[Special].—Captain Samuel Gale, the well known yachtsman, with a party, returned to the Inlet last night, after a week's gunning trip near Tuckerton, Ocean county, and reports quite an eventful trip. The party were out one night in a small boat after ducks when they were swooped down upon by a posse of game wardens and arrested for violating the game laws by burning a light on the prow of the boat to attract the ducks. The party were kept prisoners on Captain Gale's yacht all night, and the next day were taken to Tuckerton and fined \$20 each. —New Jersey paper.

I wish that same posse of game wardens long life, health and prosperity. I also wish they could be everywhere at once in order to round up the thousands of men who are slaughtering game after the style of Samuel Gale.—EDITOR.

All winter there has been a huddle of 11 quails in a clump of bushes on the West Side river bank, opposite the residence of W. L. Conyngham. On Sunday a local sportsman went over and found one sound bird, one dead one and one with a broken wing. Some miscreant had been there and killed the others. The Luzerne County Sportsmen's Club offers \$50 reward for information that will lead to his arrest.—Wyoming, Pa., paper.

If you get him let me know, so I may brand him.

Furthermore, I will gladly add \$5 to the sum offered as a reward for the capture of the shoat.—EDITOR.

FISH AND FISHING.

ALMANAC FOR SALT WATER FISHERMEN.

The following will be found accurate and valuable for the vicinity of New York City:

Kingfish—Barb, Sea-Mink, Whiting. June to September. Haunts: The surf and deep channels of strong tide streams. Baits: Blood worms, shedder crabs and beach crustaceans. Time and tide: Flood, early morning.

Plaice—Fluke, Turbot, Flounder. May 15th to November 30th. Haunts: The surf, mouths of tidal streams. Baits: Shedder crabs, killi-fish, sand laut. Time and tide: Ebb, daytime exclusively.

Spanish Mackerel. Haunts: The open sea, July to September. Baits: Menhaden, trolling—metal and cedar squids.

Striped Bass—Rock Fish, Green Head. April to November. Haunts: The surf, bays, estuaries and tidal streams. Baits: Blood worms, shedder crabs, calico crabs, small eels, menhaden. Time and tide: Night, half-flood to flood, to half ebb.

The Drums, Red and Black. June to November. Haunts: The surf and mouths of large bays. Bait: Skinner clam. Time and tide: Day, flood.

Blackfish—Tautog. April to November. Haunts: Surf, vicinity of piling and old wrecks in bays. Baits: Sand worm, blood worm, shedder crabs, clams. Time and tide: Daytime, flood.

Lafayette—Spot, Goody, Cape May Goody. August to October. Haunts: Channels of tidal streams. Baits: Shedder crabs, sand worms, clams. Time and tide: Day and night, flood.

Croaker. July to October. Haunts: Deep channels of bays. Baits: Shedder crabs, mussels. Time and tide: Day, flood.

Snapper—Young of Blue Fish. August to November. Haunts: Rivers and all tideways. Baits: Spearing and menhaden; trolling, pearl squid. Time and tide: Day, all tides.

Sheepshead. June to October. Haunts: Surf and bays, vicinity of old wrecks. Baits: Clams, mussels, shedder crabs. Time and tide: Day, flood only.

New England Whiting—Winter Weak-fish, Frost-fish. November to May. Haunts: The surf. Baits: Sand laut, spearing. Time and tide: Night, flood.

Hake—Ling. October to June. Haunts: Open sea surf, large bays. Baits: Clams, mussels, fish. Time and tide: Day and night, flood.

Weak-fish—Squeteague, Squit. June to October. Haunts: Surf, all tideways. Baits: Shedder crabs, surf mullet, menhaden, ledge mussels, sand laut, shrimp.

Time and tide: Day and night, flood preferred.

Blue Fish—Horse Mackerel. June to November 1st. Haunts: Surf, open sea and large bays. Baits: Menhaden, surf mullet and trolling squid. Time and tide: Daytime, not affected by tides.

A MAINE BUTCHER.

A back number fisherman, one Charles Horbury, of Lewiston, Me., writes a long story to the journal of that city about black bass fishing, and tells how he makes a hog of himself every chance he gets. He has made so formidable a record as a destroyer of the fishes that he has induced the editor to print his picture, and this shows he wears his bristles on the outside—of his face.

The editor also prints 2 pictures of strings of fish taken by butcher Horbury. One of these cuts represents a string of bass and perch said to have been taken in 2 hours, and which, as nearly as I can estimate, numbers 60 to 70 black bass and perch. The other shows 114 black bass strung up against the side of a house. Those, butcher Horbury says, he and a friend caught in one day.

Here is what one of Horbury's neighbors says of him, in a letter to me dated April 9th:

"I enclose clipping from a local paper showing an article which so disgusted me that I take the liberty of sending it to you. I am ashamed to say that here in Maine we have a man who calls himself a sportsman, has his picture published as such, and who boasts that he caught 114 fish in one forenoon. No wonder he wants the 25 pound law repealed. He says let a man catch all he can! How long would we have any fish to catch if all were like him? Up here in Oxford county, in our Richardson lakes, where 3 friends and I have a cottage, I have seen the time when 2 of us could catch all the law would allow (25 pounds) in half a day; but if we were allowed to catch all we could, how long would we have a chance to get even enough for a mess? We never bring out from our cottage more than 4 or 5 small fish, or 1 to 2 good ones. A few years ago my wife and I brought out 25 pounds each, and I never did anything in my life that I was so ashamed of. Now, we only catch what we want to eat!"

There is a large moose within 18 miles of here that got stuck in the deep snow. The commissioners have had him fenced in and have men feeding and taking care of

him. They are to place him in some park.
F. O. Walker, Rumford Falls, Me.

No doubt if a vote could be taken among butcher Horbury's neighbors 9-10ths of them would condemn him as roundly as this writer does.—EDITOR.

HOW FISH HOOKS ARE MADE.

It may not be generally known, but it is nevertheless a fact, that fully 90 per cent. of the world's fishing hooks are made at Redditch, England. In making fish hooks few tools are used, dependence being placed more on the skill of the workman than on expensive machinery. Nothing but the best steel wire is used. This is cut off from 20 or more coils at once, into lengths of about 4 inches, care being taken to have all of one length. Several hundreds of these lengths are placed on top of one another through 2 rings, or washers, the end projecting about $\frac{3}{4}$ of an inch. They are put into a furnace and heated a dull red; then taken out of the fire and rolled backward and forward, while in the rings, with a heavy iron bar, about $1\frac{1}{2}$ inches square. This softens and straightens the wire. After cooling they are cut into lengths sufficient for 2 hooks, and a barb is cut in each end. The workman rests the end of the wire against a block of wood and brings the knife in position. The point of the knife is hinged to the bench, and the blade is beveled on one side. With a short, cautious movement the barb is cut, care being taken to have it the correct depth. The wire is then cut in 2, the point filed and then bent around a metal shape driven in the end of a bit of wood. The barb is hooked around the end of the shape and a turn of the wrist and a pull with the finger complete the bend. The shanks are then flattened, ringer marked or reduced as desired, and the hooks are ready to be hardened. They are placed in a pan and heated to a dull red, then dumped into a cask of oil, taken out again, allowed to drain and are ready for tempering. That is the most important part of the whole business. If tempered too much they will straighten out and if left too brittle they break; so they have to be just right or the work must be done over. The surplus oil that clings to the hooks after tempering is removed by shaking the hooks on a tray in sawdust. The hooks are then put in revolving barrels to polish, and afterward blued, bronzed or Japanned. They are then ready to be put on the market.

S. Howarth, Florissant, Colo.

A CAPTURE BY OUR TROOPS.

While en route to the Philippines the second expedition stopped at Wake's is-

land, to take formal possession of that speck for Uncle Sam. We anchored off the island at daylight on the 4th of July. A few hours later a boat left for shore with a landing party, composed of General Greene and staff. The transport China was packed with soldiers. While they were awaiting the return of the landing party 3 great man-eating sharks came swimming about the ship. The boys watched them awhile. Then someone threw overboard a large iron hook, baited with a hunk of beef, and made fast to an inch rope. No one expected the sharks to notice the clumsy lure, but to our surprise one of the monsters took the bait with a rush and started back East with it. The chap holding the rope let the shark run a few feet, and then brought him up with a round turn. The crowd went wild and showered advice and congratulations on the fisherman. Meanwhile the shark was thrashing back and forth along the ship's side, occasionally leaping out of the water. I could see he was splendidly hooked, the point coming out near his eye. Everyone rushed to that side of the ship to see the fun; at least 50 men seized the rope and soon had the shark on deck. Then the crowd gathered around, and those in the rear pushed those in front close to the captive. There was where the big fish got good and even. He started by giving a few flops with his tail, and then began working both ends from the center, like the walking beam of a steamer. The old fellow knocked the sawdust out of the front rank of spectators. You should have seen the scramble to get out of range. He was finally killed with an ax. Shortly after this the landing party returned, bringing with them some of the strangest looking birds and fish I have ever seen. Then we started in on our 4th of July celebration, and the ship resumed her course for the Philippines.

Lieut. C. T. O'Keefe, Manila, P. I.

A CORD OF FISH.

F. J. L.'s letter in February RECREATION about cords of fish reminds me of a similar experience. I was living on a wheat ranch in La Moure county, N. D., along the banks of the James river, which was full of bass, pickerel and yellow perch, in the early '80's. The winter of '82 was exceedingly cold, and the stream froze solid in many places, being shallow and narrow, with a tortuous course. This compelled the fish to seek refuge in the deeper pools, where they swarmed in countless numbers. Holes were chopped through the ice and the fish were speared by hundreds. They froze stiff in a few minutes, and in several instances the settlers piled them up out of doors, like so much wood, and

covered them with snow, where they kept for a long time. When the thaw came in the spring and the ice went out dead fish were found everywhere along the banks, having died during the winter for want of oxygen, I suppose.

In December RECREATION Arch Davenport, of Ft. Scott, Kan., says he was bitten by a bass, and in February RECREATION Bloom Duncan, with his blue ribbon badge, of Paris, Tex., says he never heard of such a thing. May be, but I was witness to such a case in '97 while trolling in Lake Dunmore, Vt. I am not able to say that bass will become ferocious and attack human beings, but we had hooked a 12 pound pickerel and finally induced the fish to be drawn up alongside our boat. My friend in his eagerness to land the fish attempted to take hold by the gills. The pickerel deliberately snapped and caught my friend's hand, fair and square. It was lacerated badly, and became inflamed and swollen. Several weeks elapsed before it was healed.

Dr. J. H. V. Bache, Philadelphia.

HOW TO STOCK A LAKE.

Will you kindly advise me, through your valuable magazine, the best method of stocking a lake with sunfish and bass. The minnows will have to be transported 16 miles over a rough wagon road. I have tried several times to stock this lake, but have met with no success, all the minnows having died on the way.

An Ardent Reader, La Crosse, Wis.

ANSWER.

Stocking a lake or stream with sunfish or bass is a simple and easy process. Go to the place where the fish for stocking can be obtained, equipped with a suitable seine, wagon, buckets, and large tubs or tanks of some sort. A fine-meshed seine is necessary, of course, to take the small individuals. If the weather is warm it is well to set the tubs in the edge of the lake or stream until ready to start home. That will keep the water cool in the tubs. When a sufficient number of minnows have been secured, change the water in the tubs as completely as possible and throw a wet blanket, gunny sack or some such article over each tub to keep the water from splashing out too freely. A rough road is an advantage in one respect, as it will keep the water better aerated. If opportunity offers it may be well to change the water 3 or 4 times on the way. Care should be taken not to put too many fish in any one tub; do not crowd them. If a street sprinkler or a wagon used for hauling water for a steam thrasher or any other purpose can be obtained it would prove ever better than the tubs.

The success of an operation of this kind is largely dependent on rapidity and attention to details.—EDITOR.

ONLY ONE OF ITS KIND.

Will you please inform me to what family of fish the bullfin belongs? This fish is caught in the lakes of New York State. Is the flesh suitable for the table?

Wm. W. Kelly, Providence, R. I.

ANSWER.

The fish about which you inquire is the bowfin, *Amia calva*. It belongs to the family of *Amiidae*, and is the only known living species. Several fossil species have been described. The bowfin, which is also called mudfish, dogfish, grindle, John A. Grindle, lawyer, poisson de marais, and perhaps still other names, is found only in America, its range extending from Lake Champlain, the Great Lakes and Minnesota, South to Virginia, Florida and Texas. It frequents lakes and other sluggish waters, and is generally abundant, particularly in small muddy lakes and lowland streams. To the naturalist it is of great interest because it is a survival from an ancient fish fauna. It is not only the only living member of its family, but the only member of the order (*Cycloganoidea*) to which it belongs. It attains a length of 2 feet or more, and is a voracious game fish of extraordinary tenacity of life.

The male has a large, round, black spot at the base of the caudal fin above, which is absent in the female. The flesh of the bowfin is peculiarly soft and pasty and, with our usual methods of cooking, it is not at all palatable. Perhaps with other methods of preparation it might be made a fair food fish.—B. W. E.

THE LARGE MOUTH WILL TAKE FLIES.

The way you roast the game hogs is simply great, and I hope you will keep it up until the end of the chapter.

I want to find out if the big mouth, or Southern chub will rise to a fly as the small will?

N. P. Young, Williamsburg, Va.

ANSWER.

It is well known among anglers and those who have studied the habits of the 2 species that the large mouth black bass will not rise to the fly so readily as will the small mouth species; but that it will at times take the fly has been proved by many anglers. Considerable experience during the past year with both species in Lake Maxinkuckee, Indiana, yielded some interesting results. During July and August the large mouth was difficult to take except by trolling with live bait. In September it was more at the surface, and could be taken occasionally by casting. In

October still better results were had. It was noticed, as a rule, larger, more brightly colored flies were required than for the small mouth. However, the particular kind of fly must be determined by experiment by the angler in each locality. The large mouth varies in habits as much as does the small mouth in different parts of its range.—EDITOR.

A GREEDY BANKER.

Have you room for one more hog in your pen? William H. DuBois, president of a local bank and ex-State Treasurer, recently caught over 100 square-tailed trout in one day. I am sorry I am unable to furnish his photo, for he would be quite an addition to your swine gallery. Kindly mail him sample of your magazine.

B. F. H., Randolph, Vt.

I wrote Mr. DuBois asking whether this report was correct, and here is his answer:

It is not true that I caught 127 trout in one day, but it is true that Lyman Hutchinson and I caught that number May 20th, and it is also true that Leonard Hutchinson and I have to-day caught 132 trout, and they were beauties, too.

Wm. H. DuBois, Randolph, Vt.

What are you trying to do, Mr. DuBois? Clean out the trout streams in your vicinity? Trying to keep your friends and neighbors from getting any? If you were invited to a dinner would you try to eat everything that was put on the table, and to keep the other guests from getting anything? You might just as well. Such action would be no more ill-mannered nor disgraceful than that which you boast of in your letter.—EDITOR.

TO KEEP GUT FROM CRACKING.

W. M., Brooklyn, N. Y., wishes to know what causes gut to crack. A long article could be written on that subject. The first and foremost cause is careless handling when it is dry and brittle. I presume W. M. has some flies in his book that have rarely been out of it; some perhaps never. Those, of course, are extremely brittle. Let him stick such flies into a small piece of pine or other soft wood, side by side, rest the stick across the top of a tumbler, with the gut in the glass, fill the glass nearly to the heads of the flies with quite warm water, stir in it a tablespoonful of glycerine, and let the flies remain over night. Wipe off the gut and replace in the fly book. At the end of 2 months they will not crack so easily as those not so treated. I have monkeyed with the stuff 18 years and that is the best thing I know of. If anyone can give us anything better I should be glad to hear of it. If W. M.

will look on page 452 of "American Game Fishes" he will find a short, concise account of the manufacture of gut. There are other good things in that book, and J. H. Keene knows what he is talking about.

Chas. S. Van Horn,
Williamstown, Mass.

In April RECREATION W. M., Brooklyn, N. Y., asks the cause and remedy for the cracking of gut on flies. That is a difficult question to answer without more particulars. Exposure to the air and use will cause gut to crack. If W. M. will carefully wrap his flies up, keep them from the air and never use them the gut will last indefinitely; but as long as he uses them it will crack and wear out. Some people think the varnish at the head of the fly causes the gut to crack, but that is not so. If no varnish is used the gut will crack just the same. There is really no remedy to prevent it; but by having flies made on eyed hooks new snells can be put on in a few seconds. My exhibits at Paris are all tied hooks.

S. Howarth, Florissant, Colo.

In answer to the question of W. M., of Brooklyn, N. Y., I submit the following: The silkworm gut on flies is often of poor quality. Nothing will prevent such from cracking. Gut of good quality, if thoroughly soaked in water before it is used, will not crack. Surgeons use the same kind of gut for stitches, and sometimes preserve it in wide mouth bottles containing one part of alcohol to 3 parts of water. To this mixture is sometimes added carbolic acid, 2 per cent. Gut of the best quality if kept perfectly dry when not in use and thoroughly soaked in water before being used will keep a long time without deterioration. Very dry gut, even of the best quality, will always crack.

Prescott Dudley, Chicago.

NIBBLES.

Louis Hull, of Waterbury, Conn., went trout fishing early in April. He was lucky and returned home with 11 fish strung on a willow fork. As he paraded up the street, swinging his legs and the string of trout in rhythmic motion, a game warden met him and leveled his weather eye on the spoils. There he saw 3 fish that were under the minimum length of 6 inches, and, in fact, one or 2 of them were under 4 inches. The game warden laid his hand promptly on Hull's shoulder and said, "You are my man." Then the 2 men marched to the police court, and it was noticed that Louis's face was not nearly so proud nor so imposing as before. Neither did he make so brave an effort to get everyone to look at his string of fish. He

put up \$25 toward the filling of the State's cash box and was allowed to go his way. The next time he goes fishing he will be sure to put back all the trout he gets under 6 inches in length, or else to conceal them in his pockets and sneak up some dark alley with them.

Will you please inform me and others if you know of any place where they raise Irish angle worms. They are said to be more attractive than others, and can be seen farther in the water. I have been told they have more phosphorus in them. On my trip to Cedar lake last summer I bought a pint of worms from a train boy. I asked him how much. He said a dollar, which I thought pretty steep. He said they were Irish worms and came high. Of course I thought he was jolly-ing me, but they looked different from any other angle worms I have ever seen. They were pinker and rather small. I caught twice as many blue gills as any of the party. I often hear anglers speak about Irish angle worms, but no one seems to know where to get them.

Charles H. Potter, Indianapolis, Ind.

ANSWER.

I have never heard of Irish angle worms. The pink color of the worms was probably owing to the nature of the soil they had been living in. I do not think anyone has ever attempted to import worms into this country. The boy was surely jolly-ing you.—EDITOR.

I spent last winter in Florida, on the Atlantic coast, about 75 miles South of St. Augustine. A friend and I started early one morning, in a boat, for Mosquito inlet, to fish for channel bass in the surf. We arrived there at the commencement of the flood tide, and putting on our wading pants, commenced fishing. In about one hour we had landed 13 bass, weighing 5 to 9 pounds each. We used stout bass rods and reels. The bass are caught by wading into the surf as far as possible, then casting the line and reeling in while wading back to the shore. The bait used is mullet. A heavy sinker keeps it on the bottom until a bass takes it. Then the fun commences. It is great sport to handle those fellows on the end of a 50-yard line. I have caught a great many during the winter, but not so many before in so short a time.

E. Carpenter, Port Orange, Fla.

Can goldfish be propagated in a small house aquarium, and are there any books published that treat on that subject? If so, where can I get one?

C. H. Miller, Hermann, Mo.

ANSWER.

Yes; goldfish can be readily propagated in aquaria. After the eggs have been laid and fertilized it is necessary to remove the fish to another aquarium. Otherwise they will eat the eggs. Several papers and books have been written on goldfish culture, of which the most useful are probably the following:

"The Goldfish and its Systematic Culture," by Hugo Mulertt, Cincinnati, O., 1883.

"The Care of Goldfish," by John A. Ryder, in Bulletin U. S. Fish Commission for 1884.

Mulertt's book can probably be had by writing him at Cincinnati. The other can be found in almost any public library.—EDITOR.

I can not understand how any one with any skill at fly casting should advocate steel rods. In the few times I have attempted to use one I succeeded in getting out only 15 or 20 feet of line, and the fly would strike the water anywhere but where I had intended. It seemed to me a fine rod for a boy who wanted to yank out bullheads by main strength. I have one bamboo of 4½ ounces weight that has seen 8 years' service on the roughest streams of the Adirondacks. Another, of 5 ounces, has had still harder use for 15 years; and neither has ever given out in any way. I've handled many large trout with them, both speckled and California. I see no use in resorting to steel for the sake of durability. For accuracy in casting and pleasure in handling I fail to see how any one could favor the steel rod.

R. M. Shurtleff, New York City.

I have had a similar experience to that of R. M. Shurtleff, of Keene valley. At different times I have caught 4 silver trout in one of our streams. One I submitted to Professor Peck, of Williams college, and he said it was undoubtedly an albino. The largest weighed ¼ of a pound. None of them had spots or marks, on the back. The fins were faintly tinged with color. Four years ago I caught a 6 ounce fish without the least sign of a dorsal fin, yet he maintained his equilibrium and put up a good fight. I am greatly interested in the fishing department of RECREATION.

Charles S. Van Horn,
Williamstown, Mass.

Will some reader of RECREATION in the West or Northwest please tell me what materials and colors are used in making the "Meade" Salmon Fly, as mentioned in your Fish Department some months ago.

J. D. L., Lyons, N. Y.

GUNS AND AMMUNITION.

DRIFT AND TRAJECTORIES.

Buffalo, Wyo.

Editor RECREATION:

In discussing the drift of rifle bullets, it is a mistake to compare a long, conical bullet with a round ball, the spin of each being quite distinct. The correct explanation was given in April RECREATION by Mr. Carlin. There certainly is a drift at however short a distance, though practically it may not require any allowance.

It may interest "Frodue" to know that the .32-40 drops 3 inches between 50 and 100 yards, when loaded with Dupont No. 1, as against 5 inches with black powder. I doubt whether he could use the .30 caliber powder without having a special strong breeched barrel, except, of course, to give same velocity as the No. 1 Dupont. Express rifles in England have been loaded in this way with the government high pressure powder, though the shell had to be altered in some way from those used for black powder in the same rifles. Single and double rifles have lately been built of .300, .400 and .450 bore, especially for high pressure powder, and jacketed bullets of same length as the .30-40-220 instead of the short ones formerly used in these rifles. I intend to have a .30-72 built for as much Wettern powder as the shell will hold.*

In answer to H. L.: I have found the .22-15-45 excellent for rabbits. The trajectory, 2.71 inches at 100 yards, is low compared with other pistol cartridges. It will shoot into the regulation bull's-eye at 200 yards every time on a favorable day. I tried some 53-grain bullets and found them accurate; but I think H. L. would do better to get a .22-15-60 if he wants an extremely accurate weapon for prize shooting to 200 yards. Having a quicker twist, it would handle the long bullet better; at the same time it would permit the use of the 45-grain for rabbits. I should imagine the 55-grain bullet in a Winchester .22-13-45 would keyhole at 200 yards, as the twist is even less than in the .22-7-25. A Winchester reloading tool would load the 55-grain bullet, but at a sacrifice of a few grains of powder. Still, it could be seated by hand quite firmly as far out as the lands of the rifle would allow. The .22-13-45 is inside lubricated. The pressure with a 55-grain bullet is considerably increased, as I found when loading with

heavy charges of Walsrode. I used the long bullet in order to better maintain the initial velocity, up to 150 yards, for long shots, as grouse in the stubbles. The caps soon show when the pressure is too high.

For target work I should advise Peters' semi-smokeless, 8 grains measure. The Stevens shell is of less diameter than the Winchester, which is .207 at the base, and the former being straight inside, bullets can be seated down on a small charge if desired.

I would ask "Dough Boy" whether he find his load of 40 grains ffg powder and 100-grain metal bullet give higher velocity in his Savage than the same with factory 17-grain ball? I find the drop between 50 and 100 yards considerable with the latter. I warn intending purchasers of Savage rifles that the various cartridges take various sighting. So, unless they have an adjustable Lyman rear sight, they would do well to order the gun sighted for one particular charge. I found the trigger pull rather strong, but that is easily fixed by removing the stock. I should like to hear if anyone has found the thick grip in this rifle objectionable. I did, and have cut it down to resemble a Winchester.

With reference to the ballistic properties of the .30-30 Winchester, anyone interested can refer to the Winchester trajectory tables. If sighted to center at 100 yards it will drop about 3 feet at 300 yards. At 200 yards the drop is 10 inches. That is considered near enough to be termed point blank for hunting purposes.

This drop between distances must not be confused with the drop from the axis of the bore, knowledge of which is not of much practical use. "Subscriber," who raised the above point in August RECREATION, said a bullet at 2,000 f. s. m. v. would drop nearly 4 feet in 300 yards, since it would take the bullet nearly $\frac{1}{2}$ second to travel 900 feet. That calculation would be correct if the air had not something to do with the matter. Instead of the bullet having a pace of 2,000 feet a second after 900 feet of flight, it is only going about 1,500 feet a second. This calculation is approximated from the velocity curves officially published for the English .303 government rifle. This brings the drop to a little over 4 feet instead of less at 300 yards, on the supposition that the line of sight and the bore were exactly parallel.

To W. S. C. I would say that from the data given by him I have figured the tra-

* Who makes Wettern powder? If it is good for anything why does not the maker advertise it in RECREATION?—ED.

jectory of the .22 long rifle bullet as 15 1-6 feet at 500 yards. I think he suggested 20 feet. It is certainly amazing how accurate both this and the .22 short are at long ranges.
X. Y. Z.

STILL SATISFIED WITH THE .30-30.

Boston, Mass.

Editor RECREATION:

I have expressed my views on the subject of the .30-30 several times, and now wish to tell my last experience.

In September, '99, I hunted in New Brunswick with my Winchester .30-30, securing one moose and one caribou. I hit each but once; the moose, under the left ear, smashing the lower jaw, the bullet lodging in the heavy bone under the right antler, cutting the jugular vein on the way. He went but 30 feet after being hit. The caribou was struck in the neck, the bullet breaking it, but not passing through. He fell without taking a step. Each animal was in agony after falling, and my guide put them out of misery with a bullet through the heart, at close quarters.

Last year a friend told me the .30-30 was not powerful enough. He used a Martini-Henry express, and did not feel that it had any excess of power. He has since, in print, described a moose killing, wherein he put 6 bullets into the animal before it succumbed. Whether it was the first or the sixth shot that inflicted the mortal wound he could not say. The fact that 5 struck, with no indications of paralysis, makes me skeptical as to the claim that a large bullet, driven by a heavy charge of powder, will stun an animal, if it fails to inflict a mortal wound.

A .30-30 bullet, rightly placed, is ample. I was expressing this view to Major Hinman a few days since. He smiled and said, "Yes, so is a .22." Granted. I know a gentleman who killed a large caribou last fall with a .22. He had started for the spring, and picked up the .22 in case he should see a grouse. At a bend in the path, 20 to 25 yards away, stood the caribou. He fired 2 shots and killed it. But neither he, nor any other hunter, would consequently say the .22 is all that is needed for big game. One must have a rifle that will be equally effective at 10 times the distance, and with trajectory flat enough to be practically point blank.

I believe a hunter should have the largest caliber and highest power gun he is capable of carrying all day and able to hold true on the mark when firing. I find my maximum in the .30-30. There is no use of anyone's crying it down. Its effectiveness has been conclusively proved by others as well as by me. Some have killed game with high power guns, and the post

mortem satisfied them that one of less power would have been ineffective. That is all right. Examination of the wound in my moose satisfied me that a higher power gun would probably have ruined the head for mounting. I was glad there was no excess of power.

There is not a pattern, model or make of hunting rifle on the market but what has been successful enough to prove its capabilities as a killer. Let the man select the one that fits his physique best, learn how to use it, then devote his attention to the art of putting himself within range of whatever he wishes to kill.

It is not the rifle alone that gets the game, but a combination of any good rifle with a competent man behind it. When a hunter fails to get game, using any modern hunting rifle, perhaps he is not to blame; there may be some disconcerting circumstances; but there is one thing of which he can be sure—the fault is not in the gun. No practical man would go into the woods without having tested his rifle, made sure the sights were perfectly aligned, and, if not an expert, practiced with it sufficiently so that, at 100 yards, he can at least group a series of 10 shots within an 8-inch circle.

W. G. Reed.

THE BEST GUN.

Nevada City, Cal.

Editor RECREATION:

I am satisfied that each of our American guns is the best gun, if you know how to load it properly. To bolster that opinion I will narrate my experience with scatter guns, covering a period of 36 years.

My first gun was a Kentucky rifle, which I loaded with shot and wadded with newspaper. With it I killed mallards at 100 yards, more or less, and usually shut both eyes while pulling the trigger. The next gun I fell heir to was a 10 bore, W. C. Scott & Sons; imported at a cost of \$150. The owner, finding it would not shoot so far as his rifle, hung it up in his log house to rust. Finally it was given to me on the supposition that it was harmless. After having scoured it out with ashes I thought it the best gun in the world; though, to be candid, I did little damage with it save to blow a hole through the side of the house and wound my only retriever. With that gun I was partial to big shot, usually No. 3, and leather wads on the powder.

Powder was \$1 a pound and shot 25 cents, and I had to get a season's sport out of \$2 worth of ammunition, not mentioning the G. D. caps. By varying the load I could do either flock or single bird shooting. I have never since had the same amount of sport with 3 times as much ammunition. In those days the Mis-

Mississippi was alive with ducks and geese each spring and fall.

Coming to California in '73, I aspired to a breech loader, and a Bonehill was purchased. I know now it was a very ordinary gun, but by carefully selecting the loads to which it was adapted it did good work. A young farmer brought me his \$100 Lefever to exchange for the old gun. After I had given it 6 years of hard usage, I tried to tell him he was getting a gun worth probably \$35 for his fine new weapon; but the old gun was what he wanted.

About that time I read of smokeless powder and imported some of it; also some paper shells with strong primers. That same Lefever, with smokeless powder and No. 6 shot, would pull down ducks, geese and swan until the boys wanted to know how it was done.

As it was rather straight in the stock and weighed 9 pounds, I decided to get a lighter gun and one to fit the man. The Lefever was raffled at full value. Two of the boys won it, but could not decide who should keep it. They put it up and again raffled it, that time for twice its cost, and it is to-day rated one of the strongest shooting guns in Sacramento.

A 12 bore, 8 $\frac{1}{4}$ -pound gun was ordered from the Ithaca Co., but they were unable to make it in time. So they selected a No. 2 grade from stock, bored it to order, and sent it to me. That gun was remarkable in several particulars. It was a choke bore with thin muzzles, and after 7 years of hard usage shot closer than the day it was bored. It shot all sizes of pellets from No. 9 to B. B. equally well. It was the only gun I ever handled that was without a flaw in construction or metal. Its maximum load of powder was 3 $\frac{1}{4}$ drachms, and, while it shot all standard loads well, it required less ammunition for long range shooting than any gun I have owned. I lost it by foolishly setting a price on it, and it is now in Peru, undoubtedly doing good execution.

After that experience I concluded there are several best guns, but that they are all of American manufacture. Get an Ithaca, Lefever, Parker, Baker or Remington, and you have the best gun that money will buy or brains produce. Study it, learn the load it shoots best, and take good care of it. There may be others, but as they don't advertise in RECREATION they are back numbers and not to be considered.

W. Coyne.

TELESCOPIC SIGHTS.

Chicago, Ill.

Editor RECREATION:

Although several makers of telescopic rifle sights advertise in RECREATION, I see

little discussion of these sights in its columns.

A sportsman will buy 4 or 5 rifles, of various styles and calibers, yet he looks on an investment of \$25 in a telescopic sight as wild extravagance. In most cases 2 rifles and a good telescopic sight would be more effective in the field and at the target than a greater number equipped only with open or peep sights.

A high grade modern telescopic sight of low power and large field will facilitate aiming at any kind of game under nearly all conditions and at almost every range. Its user can find and hold on squirrels among the leaves and deer among the trees or brush, where with peep or open sights he could see nothing. A telescopic sight will enable the rifleman to hold on game or target with certainty when the light is too dim to permit the use of other sights. It will also prevent the blurring and dimness of vision which inevitably follow the use of open or peep sights.

A most absurd custom yet in vogue at the ranges of many rifle clubs whose members are practical sportsmen is the ruling out of the telescopic sight in offhand rifle contests. Years ago, before the telescopic sight was brought to perfection, it was of little aid to the rifleman, because of the small, dark field which limited its use to moderate ranges. At present, however, telescopes may be bought for little money which, with a magnifying power of 3 or 4 diameters, show an area 40 to 50 feet in diameter at 200 yards. With a sight of this kind good holding may be done on moving objects at ordinary hunting ranges, and as the sight apparently illuminates the mark it is of great assistance.

Considering its present adaptability, it would appear that the objections to its use in range contests, which were based on its former unfitness for practical field use, should be withdrawn. Many sportsmen who are good field shots, but who can not, owing to some defect of vision, do good work on the regulation bull's-eye at 200 yards, would become enthusiastic target shooters if permitted to use telescopic sights. Ordinary spectacles are not barred from the contests, and yet in the field they are much more impracticable than the telescopic sight and a great nuisance.

Some years ago only rifles of 10 pounds or less, with minimum trigger pulls of 3 pounds, were looked on with favor at the ranges. Now 12-pound rifles with fine double set triggers are found on almost every range.

Every practical device which is of assistance to the hunter and the soldier should be permitted in regular offhand contests; and under no circumstances should a use-

less incumbrance like the target peep and globe sight be given preference over a practical and useful device like the modern telescopic sight.

G. L. Lehle.

WHAT THEY SAY OF THE GUN BORE TREATMENT.

I noticed in April RECREATION a request by R. E. P., of Franklin Falls, N. H., for information concerning the efficiency of the Gun Bore Treatment. I write this from a desire to say a word of praise where it is fully merited. I had my .22 caliber repeating rifle treated by the Gun Bore Treatment Co. last year. I have used it a great many times since then, and in all sorts of weather. Last summer I took it on a camping trip, where I had it out every night for a week without shelter, as I had no tent. During that time it was surrounded by a New Jersey coast fog, than which there is nothing worse. After that treatment I brought it back home and set it away without cleaning it. When I did finally clean it there wasn't a speck of rust in the barrel; in fact, it shone like a new dollar.

O. Molatch, Brooklyn, N. Y.

Have noticed several inquiries in your valued magazine regarding the Gun Bore Treatment Co. In response would say I have had 2 Parker shot guns and 2 Winchester rifles treated, both inside and out. Have given the treatment a thorough test and can only speak of it in the best of terms. One of the shot guns in particular has been out in the rain several times and is as bright and new to-day as when bought. I let the guns go without cleaning several months at a time and the barrels are as bright and new when I do get around to clean them as when purchased; in fact, I rarely clean my .30-40 Winchester. Would not be without the treatment for a great deal, as it saves so much time and labor.

A. B. Rich, Stow, Mass.

In answer to R. E. P., Franklin Falls, N. H., inquiring about the Gun Bore Treatment, would say: I had my Winchester pump gun treated over a year ago and have shot it hundreds of times since, both in the field and at the trap. I have had it wet inside and out a number of times, and there is not a spot of rust on it. Since it was treated I have not cleaned the barrel 3 times. On seeing R. E. P.'s inquiry I cleaned the barrel and it looked the same as it did the day it was treated. I have also had my \$125 Parker treated. In my estimation the Gun Bore Treatment is the best and only thing in the market that will make guns thoroughly rust proof.

Fred N. Moffett, Bloomfield, N. J.

"R. E. P." of Franklin Falls, N. H., asks in your April issue how Gun-Bore-Treated guns stand damp weather. This is so easy, and I so love ease, that I will answer. Dampness does not cause rust or any change whatever in the locks or barrels of guns which have had the Gun Bore Treatment. As far as that danger is concerned, R. E. P. may safely leave his guns during the close season in the deepest pool under Franklin Falls.

W. H. B., New York.

SMALL SHOT.

The target printed below shows a remarkable 3-shot group which, at a recent shoot, won a silver cup for Master Hazlewood Keller, son of T. H. Keller, the New York agent of The Peters Cartridge Co. and The King Powder Co.

The shots were off-hand, at 65 feet. The rifle was a Stevens Schuetzen, with Peters .22 short cartridges:



Will some sportsman of experience tell us which is the best gun, the Parker, Remington or Ithaca?

Will some one give his experience with the Savage hammerless? Explain its good points and its faults? Which rifle is the better, the Stevens or Winchester, single shot?

Light Seeker, Floodwood, Minn.

It amuses me to read the letters of the I-load-'em-myself fellows. I have used rifles ever since I could hold one. When I threw away my muzzle loader I quit fooling with loose ammunition. I have always found factory loaded shells perfectly satisfactory, and 100 per cent. better than you or I could load them.

Jay Hawker, Helper, Kan.

Why should the pump gun be considered an unsportsmanlike arm? It is surely harder to make a kill with a full choked repeater than with a cylinder double gun.

E. B. D., Sedalia, Mo.

NATURAL HISTORY.

CLOSE ACQUAINTANCE WITH A SNAIL.

MARGARET C. MARSH.

On the beach one day I picked up a snail shell about $1\frac{1}{4}$ inches around. It was filled with a yellowish cement. That meant Mr. Snail was at home, so I laid him on a bed of wet sand, in a large clam shell, and covered him with salt water. Soon I saw a slight rising of the cement filling, and thus his egress slowly began. I have subsequently timed this emerging from the shell. It has variously occupied $\frac{1}{2}$ to one hour, the longer time caused, I think, by fear, from having felt some strange touch or vibration. On the contrary, when he is entirely out of the shell and carrying it on his back he will disappear into it in a few seconds if placed in fresh water. When retiring from choice, however, in adjusting himself to his proper position within the shell he is slightly more deliberate. "As slow as a snail" is not applicable to the special movement. In fact, in the enforced housing he has no chance to divest himself of clinging sand, and my specimens have frequently died soon after from what I believe to be wounds caused by the cutting and scraping of the sand.

The cement-like filling is, in truth, a trap door, which rises as if on hinges. It looks like a thin sheet of tortoise shell or gelatine, translucent not transparent, with radiating hair lines from a spiral at one end, like tracery on shell. As the trap door rises that which is the back part pushes out. Its first appearance is like a row of tiny, blackened teeth set in a mouth. Presently more is visible, and the effort put forth is appreciable from the darkening and swelling of the veins as the snail backs out, pushing the trap door up and over, hitching round to the right at each shove, until he has turned the trap door completely over and fitted it over the tiny hole which can be seen on the side of any snail shell. During this process the fore part, or tongue-like proboscis, has appeared, gradually pushing out between the back part and the shell's edge, its finely etched veins swelling like little streams of black fluid. By the time the trap door is fitted into place the flesh colored fore part is well out. Then is made manifest the strength of its muscle, for it tongues its way under and back until it has purchase enough underneath to turn the shell over, after which the shell rests directly on top of the middle of the snail. Before this latter turning over, however, I have several times seen a snail lie on one side, as if exhausted, for some time after

his egress; and from signs following I have come to think that during this lethargy Nature relieves herself. Afterward he moves rapidly round and round his improvised ocean, I presume in quest of food or friends.

When moving, the shell looks as if it were riding on an animated island, of which the back part is round, flat and black with veins, the front like a supple, flesh colored tongue, which flattens out to a scoloped point as long as he travels unhindered, but which is supersensitive when coming in contact with a dry surface or an obstacle. In that case the end curls up very like a human tongue, the under side being a pink flesh tint, like that of a baby's skin.

Around the lower edge of the shell, resting on the snail, is a thin milk-and-water white cuticle, apparently wrinkled up like the scarf on an Indian cork helmet. The moment I attempted to pick up the snail between my thumb and forefinger this cuticle stretched itself up and over $\frac{2}{3}$ of the shell and became so slimy I could not hold the snail without hurting it. Usually, however, that human looking eye on the shell remained uncovered. The slime is also emitted while the snail travels. This quickly glutenates the water and mats the sand.

Our little mollusk likes to burrow under the sand and lie dormant in its warmth; always, though, sending to the surface his little air shaft, which lies out like a tiny calla lily on the water, with its opening almost imperceptible or quite wide, as his little Majesty's need for air may be. In illustrations which I have seen the 2 flexible little horns are placed at the extreme front of what, for convenience, I call the proboscis-like tongue, when extended. That was not so in any of my specimens. In all of them those delicate, transparent horns, or feelers, rose from just where the shell rests on the fore part of the snail. They stand up, coming to a fine point when fully extended, but frequently doubling down to $\frac{1}{2}$ their length or fitting together in one tissue-like, grayish feeler, edged with a hair line of black. These feelers or horns seem to be used solely for detecting anything approaching from above. At that point also I have seen a round, delicate neck thrust out, having 2 little blood red spots near its end, the end being cut off square and showing a small, round aperture. Its thrust out is like that of a turtle's head and appears, I think, only when live food is near. The under part of

the snail also resembles the under cushion of the turtle, only, of course, it is much more delicate and softer.

The snail has his enemy, however. Most of the empty shells I found had a smoothly bored, round hole in one side, which told its own story. I was fortunate in finding one perfect shell. Lining it was a thin white sheet or crust, clinging so tightly just within the shell that I could not easily raise it with a penknife point. However, I placed the shell in salt water. A hidden power then lifted the lining, pushed it forward almost imperceptibly, and then dropped it back, as if the power was tired. After a moment the movement was repeated. From under the lining a bunch of tiny yellow yolks was pushed out one day when I was absent. Another day, from the outside of the shell, crawled a tiny white barnacle, like a white bedbug or hemiptera. That made its way, by sailing and crawling, into the shell, where it disappeared at the back of the white lining. In one of these shells one day the power ceased to act, and as the lining was already raised, I pulled it out. On the under side clung a partially developed snail, as nearly as I could make out without a microscope.

All the process concerning this otherwise empty shell was unique and most interesting. I failed to determine a difference in sex, but trust for more developments another summer. My first specimen lived one week, captive in the house. None of the others survived a second day, yet in all cases new salt water and fresh sand were given daily and often twice. I should like to know how small and how large the snail may be found, fully developed. The smallest perfect shell I found was less than $\frac{1}{2}$ an inch in circumference, and my largest would be about 13 inches if it were not broken.

PRAIRIE DOGS IN THE NEW YORK ZOOLOGICAL PARK.

J. ALLEN LORING.

The prairie dog inclosure in the New York Zoological Park is probably the finest structure of its kind in the world. It is circular, is 80 feet in diameter, and is built on solid masonry that reaches to bed rock.

On September 13th the society received from Mr. Howard Eaton, of Medora, N. Dak., a gift of 36 Missouri prairie dogs to be assigned to the RECREATION group. They were immediately put in their new home. Later, a second lot was received from Kansas, part of which were put in with the others, and in pursuance with the directors' long cherished plan to colonize in the big game ranges certain small species which in nature are associated with

them, the others were placed in a temporary inclosure in the Antelope Range. This pen was hastily built, and meant only to hold the animals until they had started their burrows and become established, when it was thought they would remain permanently. In these calculations the society was correct, for although a few wandered away and failed to return, enough remained to form a satisfactory colony. Visitors are now much surprised at seeing these interesting little animals living as free and natural as in their natural haunts. They have become accustomed to the antelope, and may be seen feeding about their feet with the utmost confidence. There is absolutely nothing to prevent the dogs from escaping if they chose, for the large meshes of the Page wire fence would admit an animal of twice their size. They have made permanent burrows and regard them as their homes.

During the first month of their arrival they spent much of the time digging their burrows. They worked industriously, loosening the dirt with their paws and throwing it out with their hind feet. The burrows being finished, they began carrying in grass for their nests; filling their mouths as full as they would hold and tucking in the ends with their paws. On visiting their inclosure one evening after a rain I found one dog outside, patching the damage done by the water. With his front feet he would loosen the dirt a short distance from the hole, and when his claws became so gummed he could not work, he cleaned them with his teeth and went on. When he had scratched up a quantity of earth he threw it under his belly, and with his hind feet scratched it up to the entrance, but more frequently he turned about and scooped it along with his hands, as a boy would scoop up sand. After he had pushed the dirt up on the entrance he raised himself on his feet, arched his back, and hammered it down about the mouth of the burrow with his nose; then went inside and hammered the dirt that had become soft from the rain. I watched him some time scraping up the dirt and packing it about the burrow so the water would not run in, and after he had finished I entered the enclosure and examined his work. I found the entire rim of the burrow was firmly tamped, as though someone had punched his fingers into the soft earth. Several other burrows were treated the same way.

After every rain some of our dogs may be found working about their holes, either carrying out the wet bedding or taking in new. On cold days they remain under ground, but as soon as the sun comes out they appear, and may be seen sitting about their burrows or cropping off

the grass and eating it. They seem to have lost all fear, and when food is thrown to them several scramble after it and sometimes indulge in a fight for it.

Not many days ago I was attracted by several children who were standing close to the fence and seemed unusually interested in something that was happening within. On going there I found one of the prairie dogs vigorously scratching up the dirt that had thawed since morning and pushing it into a burrow, while from the depths of the hole came the voice of another prairie dog who was scolding vigorously. When the one outside had deposited a quantity of dirt in the mouth of the burrow he went down and deliberately began ramming it in, to close up the hole. To this proceeding the other dog objected. They fought a minute or so; then one withdrew down the hole, and the other continued to hammer in the dirt with his nose. I was not more than 2 feet away and could see the operations very well. Being called elsewhere, I left the besieger vigorously at work. Fifteen minutes later I found the hole securely plugged, and the little villain who had successfully entombed his enemy, his face and feet covered with mud, was looking about for something to eat. What he had against the prairie dog in the burrow, and why he wanted to bury him, I can not explain. Late in the afternoon I again visited the enclosure and found that either the prisoner or some other dog had dug open the hole.

SOME FACTS ABOUT PORCUPINES.

S. N. LEEK.

In November RECREATION I notice several articles on enemies of the porcupine. If there is a place where porcupines are as thick as they are here I have never heard of it.

Some years ago when I settled here it was a common occurrence to have to catch both cattle and horses and pull the quills out of their noses or out of the heels of the horses. They probably would try to smell the porky and get within reach of his unerring tail. This led ranchmen to kill all the porcupines they saw; which has materially reduced their numbers. I have seen a horse step on a porcupine in a trail overgrown with grass and get all his legs full of quills. Once Dr. Noll dismounted from his horse to photograph a porky. The beast stood his ground for some time, when he made a break for cover, which happened to be the doctor's horse that was quietly grazing near. On feeling something pick his leg the horse struck out and kicked poor porky with all 4 feet at once, transferring the quills to his own legs.

One spring while hunting bear at the

foot of the Teton mountains I saw more porcupines than ever before or since. We usually put everything they could harm in the tent, but one night, coming in late, I forgot my saddle. They didn't eat it quite up, but nearly. The next evening, in walking around camp, I met 8 of them coming in to finish the saddle. Of course I didn't do a thing to them.

One day while going along the road I passed the carcass of a horse that had died the fall before, and there were 8 porkies gnawing at the bones. Farther on I saw 10 of them at work at one time on the bones of an elk. The porcupines were all full grown, and it was a poor day for them, too.

I put in a small saw mill at the foot of the Tetons and there we had trouble with the porcupines. We could not sleep while a porcupine was gnawing at the corner of the house. We would stand it as long as we could; then someone would get quietly up, steal outdoors and whack him. It is wonderful what pounding they can stand. And still they came. One night while alone at the mill I killed 7 at one trip and about midnight I got 3 more. The first one ran in front of the door on the porch, gnawing. I got him. Then I heard one on a big box beside the door. He was eating a saddle blanket. I got him also, and was about to go in when I nearly ran my face against a great overgrown one clinging to the porch post on a level with my head. He gave me such a start I missed him with an iron rod I had and nearly knocked the post out, but I got him the next trip.

We never found anything they wouldn't eat. They gnawed the whole end off the little porch we had on the house. At the creek where we bathed they took the soap we left lying on the bank. A bar of soap just makes a porky a lunch. All tools had to be put in the house or the porcupines would eat the handles; and for saddle blankets or harness they had a weakness. The men working the road had their shovel and pick handles gnawed all over and the plow handles nearly eaten up by porcupines. A man who left a wagon box on the Teton pass had one corner of it eaten entirely out and a hole 18 inches across cut through the bottom.

In skinning bears, mountain lions, lynx, wolverines and coyotes I have found porcupine quills embedded in the flesh. Once in skinning a mink I found him full of quills, but he had probably got too close by mistake. I have seen dogs get quills in them by rolling where a porcupine had been killed.

The porcupine makes several different noises. One is a sort of singing made when the old and young ones are out to-

gether. Once I slipped out from camp about sundown, with my rifle, across a small meadow and through the woods 300 or 400 yards, after a strange calling noise I heard, to find it was a porky who was probably lonesome.

I have seen porcupines voluntarily swim across a creek 75 feet wide. They seem to hear better than they see. They will either raise their quills and sit where they are, disdain to run, or will make immediately for cover, get to a log, stick their head under it for protection and flirt their tail at anything that comes within striking distance; or they will climb a tree.

HOW THE RAIL CARRIES HIS TAIL.

Are rails everlastingly sticking their noses out ahead of them, as all taxidermists I ever knew make them? Do rails always imitate wrens as to the positions of their tails?

Some time ago a picture of some American coots, by Allen Brooks, appeared in RECREATION. The coot in the foreground let her tail hang down! But the next one, as to distance, was poking its tail upward for all there was in it. In 2 rail pictures by Seton-Thompson the birds are pointing their tails skyward. I could mention many more wren-like pictures of rails.

July 23d, 1899, a friend of mine caught an immature Virginia rail, with which I spent several hours in an unused room of my friend's house. This rail seemed to bear his misfortune philosophically and did just what he pleased. While I was with him he ate flies, spiders, spiders' eggs and a locust an inch and a quarter long; drank water, walked, ran and slept. Once or twice he stretched his neck out enough to catch a fly that was quite a bit higher than his back. Never while I was watching did he point his tail upward at all. The top (middle) feathers were sometimes in a horizontal position, but they usually pointed downward.

Last spring I studied a live wild coot, uncommon here. Whether on land or in water it kept its tail pointing somewhat down.

Just once, last May, I saw a Florida gallinule, that I found pointing his little stubby "caudal fin" toward the heavens.

There are my notes on the subject. What are yours? These questions may be of small importance, but I should like to know what someone else thinks about rails.

Robert J. Sims, Jefferson, Ohio.

ANSWER.

Your observations are of great interest and undoubtedly correct, but the fact, attested by countless observers, is that the characteristic attitude of rails is with tail up. I have before me at this moment 3

good photos from wild living rails, all with tails turned straight up.—EDITOR.

THE JUMPING MOUSE.

In reply to William H. Franklin's query in March RECREATION would say that the animal he mentions is the jumping mouse, American *jerboa*. It inhabits Canada and the United States, South and West, to the Pacific. It is about 3 inches long to the tail, which is 4 or 5 inches in length. The color is a reddish or yellowish brown, as the beholder is a judge of colors, on the back; sides more reddish, with light belly. When disturbed it starts off with long, rapid leaps that carry it over the ground with great ease. Though sometimes called the kangaroo mouse, it belongs to the *rodentia* instead of the *marsupialia*. The gopher family has a somewhat similar member called the kangaroo rat, with long hind legs and tail. Its movements are about the same—long, rapid jumps.

H. J. Shelley, M. D., Ridgebury, N. Y.

Can you tell me what animal I saw while fishing in a creek. I was attracted by a noise which sounded like a frog jumping across the stream. On looking I saw a little animal somewhat larger than a common mouse, but smaller than a rat, with a very short tail and tawny, or yellow fur. It made leaps like a frog. I had often heard the same noise in the same place, but never saw the little fellow before.

J. B. Haviland,
Haverford, Pa.

ANSWER.

It must have been a jumping mouse, *Zapus hudsonius*, whose long tail was not visible to you in the imperfect light.—EDITOR.

A year ago last summer I was working in a hay field and saw something jumping much as a frog jumps. I captured it and found it to be a kind of yellow mouse, about 6 inches long, of which $2\frac{3}{4}$ inches was body and head, the remainder tail. What was it?

D. A. Dewey, Coldwater, Mich.

ANSWER.

It was a kangaroo mouse, *Zapus hudsonius*.—ED.

PROBABLY DOVES.

On a farm near this city there is a flock of about 50 birds. I think they are pigeons. They feed in a corn field in the morning, from 5 to 7, and again in the evening about 5. They appear slate colored when flying. I got within 10 yards of some and noticed they had yellow breasts. Their backs are dark, lustreless

green. Their feet are red. When flying they make a whistling sound much like that of tame pigeons. I fear to question any hunters, as there are many here who would not hesitate to destroy them. Perhaps you can tell me what they are.

J. M. Austin, Middletown, N. Y.

ANSWER.

It is impossible to identify them from your description. They may be either pigeons or mourning doves.—EDITOR.

NATURAL HISTORY NOTES.

I notice in November RECREATION that Charles Murphy, of Florence, Pa., says wild pigeons usually lay 2 eggs, sometimes 4, and that the eggs are slightly speckled. The wild pigeons in Pennsylvania must be a different kind from those we used to have in Wisconsin. The last year we had pigeons in this State I went to their nesting place near Kilbourn, in this county; also in Adams county, adjoining. I climbed tree after tree, to a height above most of the nests. No nest had more than one egg in it, and that was pure white. On one tree I counted 83 nests below me. It seems to me Mr. Murphy must be mistaken or else had the nests of some other bird in his mind. I don't believe I am the only one who has investigated along that line. Let us hear from someone else who has.

O. M. Dering, Columbus, Wis.

In the June number of RECREATION, 1899, one man said he had seen a white bird resembling a robin. I should like to let the readers of RECREATION know there is such a thing as a white blackbird. While on one of my fall trips to Livingston county, Illinois, I saw with a flock of red winged blackbirds a bird that was in every way like the red winged except that one wing and about half of the other were white. Two tail feathers and some feathers on its breast were also white. There were red spots on the wings also, as on the wings of the other birds. The white bird seemed more tame than the others and I got quite close to it, so I could examine it carefully.

R. S. Consol, Lissant, Ill.

I like your editorial in November number regarding the use of correct names. The sooner a stand is taken in that matter the sooner will people become informed regarding the correct names of our birds and mammals. Our magazines and papers teem with such names as partridge, pheasant, hedgehog, coon, bobcat, and hundreds of others. The correct names would sound much better, and no

one could be misled in regard to the identity of the bird or animal mentioned.

RECREATION is the best magazine of its kind in the United States, and I always buy it as soon as newsdealers get it.

Isador S. Trostler, Omaha, Neb.

Further answering the inquiry of Mr. D. C. Henry, in the May number:

There is one species of mountain sheep which is a creamy white in color, and another which is almost black on the back and sides. The latter is found in British Columbia, on the headwaters of the Stickine river, and is known as *Ovis stonei*, or Stone's mountain sheep, named in honor of Mr. A. J. Stone, a member of RECREATION staff, who discovered it. The white mountain sheep is found farther North, in Alaska, extending almost to the Arctic ocean, and is known as *Ovis dalli*, or Dall's mountain sheep.

Dr. C. W. Haentschel, Mattawa, Ont., has sent me the photo of a mounted Virginia deer that was, when killed, apparently in a transitory stage from normal color to albino. The natural gray color predominates on the back and extends about 1-3 of the way down the sides, but the remainder of the body is beautifully dappled gray and white. The specimen is a buck about 2½ years old. It was killed by William O'Connor, of Bonfield, Ontario, near Lake Tolon, 25 miles West of Mattawa, and was mounted by William C. Le Heup, of Mattawa. It is said the owner has refused \$250 for the skin.

In your issue for December, '99, I see the statement that the scarcity of bluebirds is due to their being killed by men and boys. That may be one of the causes, but the English sparrows can account for more dead bluebirds in one hatching season than all the men and boys can in 5 years. I've seen sparrows take young bluebirds out of the nest, drop them to the ground and appropriate the nest themselves. Wrens are getting scarce for the same reason. All States should encourage the extermination of English sparrows.

James A. Elliott, Laclede, Mo.

What can I feed salamanders, lizards and small snakes to keep them alive in confinement?

C. B. Meeks, Daytona, Fla.

ANSWER.

Salamanders and lizards take earth worms, and the larvæ of the brown beetle (meal worms) in captivity. Small snakes feed on earth worms, small fishes and frogs, according to the species and locality whence obtained.—EDITOR.

THE LEAGUE OF AMERICAN SPORTSMEN.

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DISCOUNTS TO LEAGUE MEMBERS.

The following firms have agreed to give members of the L. A. S. a discount of 2 per cent. to 10 per cent. on all goods bought of them. In ordering please give L. A. S. number:

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GOVERNORS FAVOR PROTECTION.

The following letter was sent the Governors of those Western States in which antelope may yet be found:

To His Excellency,

The Governor of _____,

Dear Sir:—I beg to submit herewith copy of a resolution adopted by the League of American Sportsmen, at its second annual meeting in this city on February 14th, and I respectfully request and urge you to have a bill drafted and presented to your Legislature, providing for a ten years' close season on antelope as prayed for in this resolution.

I need not take up your time with arguments on this proposition. It is well known to every close observer that the antelope have decreased everywhere at least 50 per cent in the last 3 years, and they have been entirely swept off from large areas where 10 years ago there were thousands of them. At the present rate of killing 3 years more will wipe them out entirely, and I trust you and the members of your Assembly may therefore consent to stay the hand of the destroyer before it is too late.

Hoping you may see fit to act favorably and promptly on this matter, and begging the favor of an early reply, I am,

Yours respectfully,

G. O. Shields.

President.

The resolution referred to is as follows: Whereas, the Prong Horn Antelope, one of the most beautiful of American game animals, is in imminent danger of speedy extermination, and.

Whereas, the only remaining specimens

of these animals are now found in Montana, Wyoming, North Dakota, South Dakota, Idaho, Colorado and Utah;

Therefore, Be it resolved that the Governors and the members of the Legislatures of these States are hereby respectfully requested and urged to enact laws prohibiting the killing or wounding of antelope at any time within the next 10 years, and that a heavy penalty be attached for each violation of such laws.

Unanimously adopted.

Arthur F. Rice, Secretary, G. O. Shields, President.

The replies received from the several Executive officers explain themselves:

The State of Wyoming,
Executive Department, Cheyenne.

Dear Sir:—Your letter of the 20th ult. is received on my return from Washington, and I have carefully thought the matter over. My mind is not fully made up yet as to whether or not I shall be willing to recommend so long a closed season on antelope, as 10 years is a long time, and the wishes of our own people have to be considered in this matter.

I could not make any recommendation, anyway, before next year, when our Legislature meets. In the meantime, I shall be glad to hear from you or to see you and discuss this question.

DeF. Richards,
Governor.

Hon. DeForest Richards,
Governor of Wyoming, Cheyenne.

Dear Sir:—I regret I could not have had the pleasure of meeting you while here and an opportunity to talk with you about game protection. My interest in the matter is merely that of humanity, for I do not expect ever to do a day's hunting in your State. In fact, if I should camp there a year I should not care to kill another antelope or elk, I have killed 3 or 4 of each, and that is all I want. I have grown to love these creatures to such an extent that I am devoting my life to the cause of preserving them from threatened destruction. If a 10 years' close season could not be provided, then it would be entirely satisfactory to me to make it 5 years. Possibly near the close of that period the people would demand an extension. If not, and if the game should become sufficiently plentiful by that time to again admit of hunting, well and good.

Yours respectfully,

G. O. Shields,
President L. A. S.

Executive Office, Helena, Montana.
Mr. G. O. Shields, President,
23 W. 24th St., New York City.
Dear Sir:—Governor Smith is in receipt

of your letter of the 20th ultimo, enclosing copy of resolution of the League of American Sportsmen, adopted at its last session, relative to the future protection of antelope, and directs me to say that he will keep the matter on file and present it to the next legislative assembly, which meets in January next, with recommendations for legislation along the line suggested.

Very respectfully,
Charles F. Word,
Private Secretary.

State of Idaho, Executive Office.
Boise, Idaho.

Dear Sir:—In the absence of Governor Steunenberg I acknowledge receipt of your letter of the 20th inst., together with resolution. I will place same before the Governor on his return from the East.

Yours respectfully,
J. W. McKinney,
Private Secretary.

State of North Dakota,
Executive Office, Bismarck.

Dear Sir:—Your communication of the 20th inst., enclosing copy of a resolution adopted by your Association, has been received and same has had my consideration. The matter will be brought to the attention of our Legislature at its next session. It convenes on January 1st, 1901, and the subject will be presented for the consideration of that honorable body.

Yours truly,
F. B. Fancher,
Governor.

ANOTHER IMPORTANT ACHIEVEMENT.

One Reynolds, editor of the Ancient Defender of Game Hogs, predicted when the L. A. S. was organized that it would never "accomplish any important achievements"; but it has accomplished many. Here is the record of another:

Captain Thomas Perry, U. S. N., Secretary
Lighthouse Board, Treasury Department,
Washington, D. C.

Dear Sir:—I am receiving frequent complaints from various points on the coast, East and West, to the effect that certain members of the lighthouse and life saving crews are killing game in violation of State laws. One instance of the many that that have come to me is the case of the crew stationed at the Fire Island Light. I am informed that certain members of this crew have taken advantage of their isolated position, their leisure and their intricate knowledge of the land and water about them, to hunt geese and ducks at night by the aid of jack lights. This is in violation of the laws of this State. Furthermore I am told that these

men kill birds and water fowl of various kinds at any time of year, whether in open or close season.

I beg to suggest that an order should be issued to all such crews, cautioning them against violating the game laws of the respective States in which they may be stationed.

I should be glad to be advised of your action in this matter. Yours respectfully,
G. O. SHIELDS, President.

ANSWER.

Office of the Lighthouse Board.

Washington, D. C., March 8th, 1900.

Sir:—The Board acknowledges the receipt of your letter of March 5, 1900, stating that you have received frequent complaints from various points on the coast, East and West, to the effect that certain lightkeepers are killing game in violation of State laws.

In reply the Board expresses its interest in the cause you advocate, and states that it has issued a circular letter to the lighthouse inspectors in charge of lake and coast lighthouse districts, East and West, directing each to caution the lightkeepers under his charge against violations of the game laws of the States in which they may be stationed, with a view to inculcating in them a spirit of protection, not only of the game birds, but of song birds and of all bird life. Respectfully,

THOMAS PERRY,
Captain, U. S. N.,
Naval Secretary.

This will certainly prove another dose of gall and wormwood for Reynolds.

MASSACHUSETTS TO THE FRONT.

The Hon. Harry D. Hunt, member of the Massachusetts House of Representatives from North Attleboro, has done stalwart service to the cause of game protection during the past 3 months in his advocacy of House Bills 549 and 550. These provide for a uniform open season on ruffed grouse, quails, woodcock, rabbits, etc., consisting of the months of October and November. These bills also aim to prohibit the sale, at all times, of woodcock and ruffed grouse. On April 16th the House passed these bills to a third reading, which is almost equivalent to a final passage, and at this writing it seems certain they will be passed to the Senate for action at an early day. Mr. Hunt has worked unceasingly for the furtherance of these measures, as has also Mr. Heman S. Fay, chief warden of the Massachusetts division of the L. A. S. If the bills finally go upon the statute books the sportsmen of Massachusetts and the country at large will owe a debt of lasting gratitude to Mr. Hunt and to Mr. Fay. If either of

these gentlemen ever wants anything at the hands of the public, RECREATION will do its best to aid him in his efforts.

A neat, tasteful, show card has been printed bearing the following legend:

JOIN THE L. A. S. AND PROTECT
THE GAME.

APPLICATIONS RECEIVED HERE.

These cards are 10x12 inches in size and are printed in 3 colors, with a neat border. They show up nicely, and are suitable for hanging in any man's office, workshop or den. Every member of the L. A. S. should have one and should hang it where callers will be sure to see it. Thus the L. A. S. will be called up and the interest therein of the exhibitor of this card will be made known. To follow up this line of work every member should have a lot of blank applications on tap, ready to fill out at a moment's notice. If you will each get one of these cards, hang it up and respond promptly to the inquiries it will give rise to, thousands of memberships may be enrolled within the next 6 months.

These cards are too expensive to send out unless they are to be put to good use. Shall I send you one? If so, will you hang it up? Will you point it out to such of your friends as may fail to see it? Certainly every member of the League should evince this much interest in the great work the League is doing.

Let me hear from you at once.

Mr. Ernest Seton-Thompson delivered a lecture at Wallack's Theater on the night of April 15th, for the benefit of the League. His subject was "American Wild Animals of To-day," and the lecture was beautifully illustrated with a large number of stereopticon slides. These were made from photographs and from Mr. Thompson's drawings. Much of the subject matter of the lecture was new, and was prepared especially for this occasion. The entertainment netted the League \$384.50. It would have netted at least twice that sum if the members in this city and vicinity had done their duty.

The Indiana Division of the League has been organized, with the Hon. Frank L. Littleton, of Indianapolis, as chief warden. He is one of the most prominent and active sportsmen of the State. He served a term in the Legislature, and is responsible for some of the best features of the game laws of that State. He is an able lawyer, an influential citizen, and we may confidently expect the Indiana Division to grow rapidly under his leadership.

FORESTRY

EDITED BY DR. B. E. FERNOW,

Director of the New York School of Forestry, Cornell University, assisted by Dr. John C. Gifford, of same institution.

FOR ANOTHER NATIONAL PARK.

WALTER N. PIKE.

All lovers of nature and sympathizers with forestry movements will be glad to learn an effort is being made to have Congress establish a National Park in the Southern Appalachian region. The Appalachian Park Association, an organization composed of citizens from many States of the Union, has adopted a memorial, presenting reasons for the establishment of such a park. One of them is that there is no national park of the character of the one suggested East of the Yellowstone, which is considerably more than 2,000 miles from the Atlantic coast.

The location recommended for the park by the Association in its memorial lies partly in Western North Carolina and partly in Eastern Tennessee, in the heart of the Great Smoky mountains, the Balsam mountains, and the Black and Craggy mountains. There the noble Appalachian system, the backbone of the area between the Atlantic ocean and the Mississippi river, finds its culmination, and is broken into half a score of lateral and cross ranges, which are intersected with deep valleys, rivers and waterfalls, combining to make it a region of unsurpassed attractiveness. There are within the area no less than 43 mountains of 6,000 feet and upwards in altitude, and 80 which exceed 5,000 feet and nearly approximate 6,000; while the peaks exceeding 4,000 feet are almost innumerable. No other portion of the United States displays an equal richness of sylvia in the variety of its hard woods and conifers. Professor Asa Gray, the eminent and lamented botanist, stated that he encountered a greater number of indigenous trees in a trip of 30 miles through Western North Carolina than can be observed in a trip from Turkey to England, through Europe, or from the Atlantic coast to the Rocky mountain plateau. Here is the meeting place of the mountain flora of the North and of the South, and the only place where distinctive Southern mountain trees may be found side by side with those of the North.

It is a widely recognized fact that the plateau lying between the Great Smoky mountains and the Blue Ridge is one of the most deservedly popular health resorts of the world. It is the far-famed "Land of the Sky," of which Asheville, the "Saratoga of the South," is the commercial and

tourist center; a region which enjoys the unique distinction of being equally famous both as a summer and a winter resort. The geographical location and the geological formation are peculiarly adapted to the production of those conditions which make for health in general. Malaria is unknown, while it rivals Arizona as a sanatorium for those suffering from pulmonary troubles. Our present existing national parks can only be visited in summer, snow and ice barring the way at all other seasons; but if a national park were created in this favored mountain region it could be visited and enjoyed at all seasons of the year. This part of the Appalachian range, lying as it does midway between Maine and Texas, Canada and the Gulf, and but 24 hours from New York, Chicago, St. Louis, Toledo and the Gulf States, is within easy reach of millions of people, and a park there could be, in fact as in name, a national park.

The tract of land recommended by the Association for the park contains the highest mountains and the finest scenery in the whole Appalachian system, and embraces the largest area of virgin forest and the finest example of mixed forest (by which is meant a forest of deciduous and evergreen trees), in America. Neglect on the part of the National Government to save this forest may, in fact, be almost certain to work irretrievable loss. Standing on the summit of one of those sublime heights, the eye often seeks in vain for the bare mountain side—the evidence of the devastating axe and its more deadly and sure successor, fire; and before one stretches out a view magnificently beautiful. The strongest economic reasons make it the duty of the National Government, as the guardian of the national interests, to acquire the proposed area, convert it into a national park, and, by the application of methods of scientific forestry, preserve the forests as a heritage and a blessing to future generations. At this late day the calamities of flood and drought resulting from the wanton destruction of forests are well known. The experience of the old countries stands as a warning. The forest once destroyed can not be restored to its virgin state. Reforestation is a slow process; it is, as has been truly said, for subsequent generations. The increasing scarcity of timber is causing the large areas of forest in this part of our country to be

rapidly acquired by those whose one thought will be immediate returns from a system of lumbering utterly reckless and ruinous from any other point of view; and in a few years, unless Congress acts in the matter, this forest will be a thing of the past. Many rivers rise in these mountains, and the same causes which will destroy the forests will work irreparable injury to the sources of the water supply.

The land is held in large areas, settlers are few, and a comparatively large park could be secured at much less than its value to the nation. It is confidently asserted that no forest reserve of the country, with possibly one exception, would yield a larger return to the Government. As the Government is now about to test :ethods of scientific forestry it would seem that no better place could be found for the institution, on a governmental scale, of forestry operations; and because of the fine climate, summer and winter alike, it would be the only forest reserve of the country where such operations could be carried on uninterruptedly throughout the year. Such a park would mean the sure preservation of our Eastern game birds and animals, and would be a mecca of delight toward which many thousands of health and pleasure seekers would annually set their faces.

BOOKS FOR A RANCHMAN.

A young forester far away from libraries writes for suggestions in reference to books. I suggest the following:

First, good reference books and dictionaries—Webster's International Dictionary; Rand, McNally & Co.'s Atlas (latest edition; costs about \$7.50); Bailey's Encyclopedia of Horticulture (first volume is ready); a French Dictionary, Spiers and Surene; a German Dictionary, Grieb; a Spanish Dictionary, Seane; a good Arithmetic, Lubsen; a good book on book-keeping.

"Game Birds of the U. S.," by Elliot.

"Antelope and Deer of America," by Caton.

"Taxidermy and Zoological Collecting," by W. T. Hornaday.

"The Big Game of North America," by G. O. Shields.

The American Lumberman, a weekly journal, published in Chicago.

The Forester, official organ of the American Forestry Association, Corcoran Building, Washington, D. C.

The Scientific American, New York.

Reports of the U. S. Division of Forestry, Washington, D. C.

Schlich's "Manual of Forestry."

A good book on surveying and road construction.

Britton and Brown's "Illustrated Manual of Botany."

Reports of the U. S. Fish Commission, Washington, D. C.

"Studies in Forestry," by Nisbet.

"Forest Protection," by Nisbet.

If you read French you should subscribe for *Revue des Eaux et Forêts*, Paris, France.

If you read German you should subscribe for *Zeitschrift für Forst und Jagdwesen*, Julius Springer, Berlin, Germany, or *Allgemeine Forst und Jagdzeitung*, Frankfurt-on-the-Main.

The best German books on silviculture are Gaver's "Der Waldbau" and Fischbach's "Lehrbuch."

To become acquainted with forest conditions in the United States he should secure through a Senator or Congressman Document No. 181, 55th Congress, 3d session, which is a full reference book of over 400 pages on all phases of the subject.

He should also try to secure as many publications of U. S. Division of Forestry, Dept. of Agriculture, at Washington, D. C., as possible, by corresponding with that Division.

The American Lumberman, Chicago, will give him an insight into market conditions.

He should have Schlich's "Manual of Forestry," the only comprehensive textbook in the English language, and Lovey's "Handbuch der Forstwissenschaft, Tübingen," in 3 volumes, or Fischbach's "Lehrbuch der Forstwissenschaft," in one volume, which is excellent.

This list could be enlarged considerably, but will answer for a good beginning.

ENGLISH WALNUTS IN NEW YORK.

Seeing the letter of inquiry of F. P. Zacheile in regard to nut culture and the answer in March number of RECREATION leads me to give my personal experience with the English walnut in Western New York. There are several varieties of the English walnut, or, strictly speaking, the Persian nut, the home of this nut being the same as that of the peach and apricot, Western Asia. The walnut was taken into Greece, by the Greeks into Rome, and by the Romans throughout Continental Europe, reaching England about 1562. This nut in its travels through various nations has had many names. The Greeks called it "The Royal Nut"; the Romans, "Jupiter," or "Nut of the Gods"; and the English, "Walnut," meaning foreign nut. There is record of a single tree being sold in England for \$3,000, to be used for gun stocks, as the wood has a beautiful grain.

In extremely cold weather in this section of the State fruit trees are damaged by freezing, but I have never had one of my

English walnut trees injured in the least, while peach trees but a short distance away in the same orchard would be frozen to the ground. My first experience began with these trees or nuts in '76, while on a trip to Pennsylvania. There I found a tree in bearing and brought home 7 of the nuts. Those I planted in the spring of '77, and as all grew, I have 7 trees in bearing. They are 49 inches in circumference one foot above the ground and 30 feet in height. The branches have a spread of 35 feet. From nuts planted from these 7 acclimated trees I have a good grove, which is of great interest to all who see it. These trees began to produce in about 8 or 9 years from the seed, and have increased in production every year since, for unlike the black walnut, they bear every year. I consider myself fortunate in having obtained the right variety of nuts at the start, and

can see no reason why I can not obtain as large a yield as from a grove of similar age and size in California. My trees were so filled with nuts last fall that the lower branches were touching the ground.

Norman Pomeroy, Jr., Lockport, N. Y.

APIARIES IN RUSSIAN FORESTS.

Mr. Frank Benton, of the U. S. Department of Agriculture, a great authority on the subject of bees, writes that "In Russia large apiaries, even thousands of colonies of bees, are kept successfully in the forests; in fact, in some instances the colonies are located in the hollows of large standing trees, the cavities having been arranged to accommodate the bees, and a removable side adjusted so the bee keeper can remove the honey at the proper season."

PURE AND IMPURE FOODS.

"What a Man Eats He Is."

Edited by C. F. LANGWORTHY, PH. D.

Author of "On Citraconic, Itaconic and Mesaconic Acids," "Fish as Food," etc.

WHY SALT IS USED IN BUTTER.

Most Americans seem to prefer the usual salted butter, though there are those who wish the slightly salted, or fresh, butter which is commonly eaten in England and on the Continent. Many of our leading hotels and restaurants serve fresh butter, and those who prefer it can usually procure it if they will take the trouble. Practically all butter contains some salt. Hassall says fresh butter contains 0.3 to 2.01 per cent., and salt butter 1.53 to 8.24 per cent. In ordinary American butter about one ounce of salt is used to the pound.

Mr. H. W. Lawson, discussing some experiments with dairy salt conducted at the Wisconsin Experiment Station, speaks of the reasons for adding salt in making butter, and makes the following statements: It is estimated that approximately 82,000,000 pounds of salt, valued at about \$800,000, are used annually in the United States for dairy purposes. Good salt is so important a factor in making good butter and cheese as to entitle the matter to investigation.

Chemically, salt is a compound of chlorine and sodium, known as chlorid of sodium or sodium chlorid. It always contains appreciable quantities of a number of other substances which are present as impurities. These may be in the form of chemical compounds occurring in nature with salt or

added during the process of manufacture, as calcium sulphate, calcium chlorid, magnesium chlorid, magnesium sulphate, sodium sulphate, calcium carbonate, and magnesium carbonate; or, in the form of mechanical impurities, as dirt, pan scale, pieces of wood, and the like. Water also constitutes a certain percentage of commercial salt.

The use of salt in butter making is considered as serving three distinct purposes. In the first place it aids in the process of working, which has for its object the removal of buttermilk. When salt is added to the butter the small globules of buttermilk tend to collect into larger drops, which are more readily worked out. The liquid thus removed from the butter differs from buttermilk in having, in addition to a considerable portion of the salt, no fat and only a small content of protein as compared with that of milk sugar. The extent to which salt is of value in this way is indicated by a comparison of the composition of salted and unsalted butter. In a summary of compiled analyses the average water content of 242 samples of unsalted butter was 1.12 per cent. higher than the average water content of 1,676 samples of salted butter. The value of salt as a preservative is another important reason for its use. While salt in the quantities ordinarily employed will not en-

tirely prevent the decomposition of dairy products by the action of bacteria, it is of decided value in increasing the keeping qualities of butter, and at the same time is free from objections that are urged from a physiological standpoint against the use of many other preservatives. The improvement of flavor is the third and probably the most important purpose fulfilled by salt in the manufacture of American butter.

In cheese making, as in butter making, salt plays an important part. It tends to lessen the water content of cheese, and in so doing exerts an influence on the ripening process. It is also equally useful in giving the cheese a pleasant flavor. A coarser salt than for butter making is often preferred. The same objections, however, may be urged against the impurities. The presence of chlorids of magnesium and calcium give rise to a bitter taste, and colored specks and other impurities in the salt become apparent in the product and tend to lessen its value.

A comparative test was made of salting butter with fine grained and coarse grained salt. The butter from each of twelve churnings was divided into two portions, one of which was salted with fine and the other with coarse salt. The weight of each lot was determined before and after salting and working. As far as weight is concerned, this particular experiment shows a difference in favor of coarse grained salt of 1.8 per cent., with no marked difference in the flavor of the butter.

PURE FOOD LEGISLATION.

The importance of securing pure food is now quite generally recognized. A number of the States have enacted general legislation regarding the manufacture and sale of food. Massachusetts, New York, Connecticut, Pennsylvania, Ohio and North Carolina are among the foremost in this movement. A number of States have laws regarding the sale and manufacture of one or more products, notably oleomargarin. Many important investigations regarding the character and extent of food adulteration and sophistication have been conducted in a considerable number of States, and the Canadian Government has also made important contributions to the subject. The primary object of pure food legislation is to protect the consumer and the producer also. The consumer of impure or adulterated goods is injured in health or purse, while the business reputation and purse of the maker of first class goods are injured by flooding the market with adulterated or sophisticated products. Other objects of pure food legislation are to determine what constitutes adulteration in different cases, to fix standards of purity

and to make regulations regarding labels and printed statements of the character of the various products.

It is evident to all that harmful materials should not be sold as food. In the manufacture of certain products it is claimed that additions are necessary in order to secure the best results. Thus it is sometimes claimed that chocolate requires the addition of some starch. If this is true, the limit of such addition should be fixed by law. If other kinds of mixtures are to be sold, they should not be given misleading names. Coffee with a little chicory added is sometimes said to be preferable to coffee alone, but the consumer should have the choice and should not be compelled to buy the mixture under the name of coffee.

If coloring matter or preservatives are added to any food, that fact should be plainly stated. The consumer can then judge whether he desires the goods or not. It is sometimes claimed that certain canned vegetables are not salable unless slightly colored, and that the amount of coloring matter present is not harmful. If the fact that such goods are colored with a certain substance is plainly stated there is at least no deception practiced. The use of any coloring matter or preservative which experience or observation has shown to be harmful should be forbidden.

When either goods of an inferior quality or a mixture of such material and good materials is sold at the same price and under the same name as articles of superior quality, the purchaser is deceived, if not injured.

To be wise, pure food laws should be just to all parties concerned. The problem presents many difficulties, but is of such vital importance that it deserves the attention of all since it concerns all.

THE FOOD AND WATER SUPPLY OF THE NATIVES OF AUSTRALIA.

The chief occupation of the blacks, as the natives of Australia are called, is the search for food. Lizards, grubs and small marsupials are all eaten. The house cat has become wild in Australia, and in certain regions is a common article of diet. The larvæ of a number of insects are also eaten, usually raw. Of these the larva of the coccus moth is about the size of a man's finger. The much inflated abdomen of female ants of a wood-boring species is a highly prized delicacy. The natives will dig a hole several feet deep alongside of a decayed tree to obtain one of these insects. Eggs of the emu, eagle and other birds are eaten and the flesh of the eagle also, although the latter is so offensive that dogs will not touch it.

Eggs and game are usually cooked by roasting in hot sand. So prepared, the food

is very palatable, according to the testimony of a naturalist who had passed much time among the blacks.

The seeds of various acacias and grasses are pounded, mixed with water into a sort of cake, and baked on the ashes. Other seeds, roots and vegetable gums are eaten; also a kind of bark which is ground fine. It is at all times a most difficult matter to procure sufficient food, and this has been advanced as a reason for the cannibalism which exists among many native Australian tribes.

In western Australia there are no rivers or permanent creeks, and the natives depend on rock holes, as natural reservoirs in the granite rock are called, and wells. The latter are seldom very deep. The rock holes and wells are often filled with sticks to prevent animals getting the water, and to hinder evaporation. This practice injures the quality of the water, which is frequently black, with a foetid smell and taste. A limited supply of water of fine quality is obtained from the roots of the mallee tree. When the proper kind of root is found it yields fine, clear and cool water, which at times drops rapidly from the broken roots when they are held vertically. There are doubtless outward signs which indicate to the natives the trees whose roots will yield water, as they usually succeed when they attempt to find it, while others generally fail.

Sometimes water is found in hollow trees, where it is frequently preserved from evaporation for a long time. The natives are quick to detect such trees. A recent writer tells of a native who noticed a string of ants going up and down a tree, entering and emerging from a small knothole about 5 feet from the ground. This was a sufficient indication for the native, and making a tube from a straight twig by loosening the bark between his strong jaws and then stripping it, he obtained a drink by sucking up the water through this improvised siphon.

COLD STORAGE OF GAME.

Cold storage of game does not recommend itself to those who are at all particular as to the condition of their food, although this method of preserving beef and mutton has been found satisfactory. In the first place, the beef or mutton is dressed and is as clean as possible, since it is well known that cleanliness is a prime requisite for storage. Game birds are usually stored unplucked and undrawn. Any filth on the plumage remains, as well as undigested material in the crop and intestinal tract. Small game, especially birds, are not so easily preserved as large animals such as steers or sheep, as is shown by the fact that the former require a considerably lower

temperature than the latter. In other words they undergo decomposition more readily. This is doubtless due in part to the fact that they are stored undrawn. Experiments have been made which show that drawn poultry keeps much better than undrawn. A recent writer says, "Under precisely the same conditions of temperature and humidity drawn fowls will keep 20 to 30 days longer than those not drawn. The presence of undigested food and of the excrementitious substances in animals which have been killed favor tainting of the flesh and general decomposition. The viscera are the first parts to show putrescence, and allowing these to remain within the body can not do otherwise than favor infection of the flesh with bacteria and ptomaines, even if osmosis does not actually carry putrid juices to contiguous tissues. Hunters know the value of drawing birds as soon as possible after they have been shot, in order to keep them sweet and fresh and to prevent their having a strong intestinal flavor."

The point raised by this author concerning the passage by osmosis of material from the intestines into the flesh of stored game is a matter of considerable importance and one usually overlooked. In plain words this means simply that the juices from the excrement and fermenting material present in the intestinal tract when the bird was killed soak through the intestinal walls into the flesh even if fermentation is arrested by cold storage.

Does anyone suppose that birds which have been stored unplucked and undrawn are washed before they are cooked? Possibly this is occasionally done. Some birds which the writer saw prepared in a first class restaurant during the progress of a dietary study were not so washed. They had been kept until they had a pronounced odor. The feathers were hurriedly stripped off, the intestines removed, and the partially decomposed bird broiled and served. It is not surprising that such food possesses a noticeably "gamey" flavor, nor is it surprising that serious digestive disturbances often follow its consumption. The wonder is that all who eat the vile stuff are not poisoned.

When our cook kneads the dough she
smiles,
And pats it gently, so
It will not be too crusty. That
Is why she kneads the dough.

When my wife needs the dough she smiles,
And pats me gently, so
I will not be too crusty when
She says she needs the dough.
—Baltimore American.

BOOK NOTICES.

DISREPUTABLE CRUELITIES.

The Humanitarian League, of London, is an organization which I wish God-speed, with all my heart. It denounces all forms of cruelty toward animals, both tame and wild, from the disgusting chase (?) of tame stags by the Queen's hounds and by lords, ladies and snobs, down to the loathsome and brutal pastime of rabbit-coursing by the unwashed rabble. The latter diversion consists in allowing dogs to tear live rabbits asunder in the name of sport. Bad as this is, the tame stag business, is infinitely worse, because the people who participate in it are educated, and owe it to society to stand for civilization rather than for savagery. One could enter with some interest into a race after hounds following the trail of an anise bag; but to take a tame and sedentary deer from a small pen, turn it loose and force it to run, under protest and without knowing why, driving it over palings and wire fences, into barns, houses, and even into the waiting room of the royal railway station—faugh!

The joint authors of the campaign document before me do not mince matters in the least, and as occasion requires they strike with all sorts of weapons, from rapiers to sledge hammers. Vivisection receives some of the hardest blows I have ever seen administered to it, and, for that matter, so do many other forms of cruelty to wild creatures. People in this country will be startled by learning of the immense numbers of wild song birds that in England are kept in tiny cages. Larks, linnets, bullfinches, warblers and tits sell at prices varying from one to 2 shillings a pair. Greenfinches are often sold at a half-penny each. One dealer advertises an annual trade of 30,000 cock larks; and in England, bird catching, with nets and bird lime, is pursued by thousands of persons, both in a professional way and as a pastime. Fortunately for American birds, people in this country, as a rule, find no pleasure in the contemplation of insectivorous birds threshing about in nasty little cages, so small the birds can scarcely turn around, and slowly starving for insect food which can not possibly be supplied them. It would be a good thing if every reader of *RECREATION* would resolve never to capture an insectivorous bird, and I should be glad to see their keeping absolutely prohibited, even by zoological gardens if need be.

One of the strongest papers in the book before me is that by Miss Edith Carrington, on "The Extermination of Birds." In addition to the cage bird evil, already men-

tion, she takes up the women who wear bird millinery, and gives them fits. In their turn, the live pigeon shooters, the egg stealers, and the men who eat larks and robins, at one and sixpence a dozen, come in for a lambasting and a showing-up that would bring the blush of shame to the cheek of a self respecting dog.

Beyond question, the Humanitarian League is an organization destined to accomplish a great amount of good, much of which can be brought about through the circulation of its publications. In these days of slaughter and cruelty in many forms, it is well that good men and women should organize for systematic and aggressive work against cruelty to helpless creatures. While I can tolerate the pursuit of wild creatures on their chosen ground, and the quick death of a few under conditions which give the game a fair show, I have no patience with any of the unsportsmanlike, unmanly and unwomanly practices that are attacked in this document.

"Cruelties of Civilization; A Programme of Humane Reform." Edited by H. S. Salt. Humanitarian League Publications, No. 2. Bellamy Library No. 25. For sale by Brentano, New York.

AN IMPORTANT FORESTRY BOOK.

"North American Forests and Forestry," by Ernest Bruncken. Published by G. P. Putnam's Sons.

This interesting volume, the intent of which is to show the relations of the forest to the national life of the American people, is an excellent, popular book. The author is a lawyer who has studied forestry several years, and was secretary of the Wisconsin State Forestry Commission. Many parts of this book are well worth quoting. Many people believe that the work of the forester relates to trees whether along streets, in parks or in the forest. The forester has to do with forests, and, as Bruncken says, "The forest is not a thing that was made once and remained the same every after. It grows and develops as a whole, just as each individual tree grows from infancy to old age. Again, this growth and constant change take place according to complex and unalterable laws. Each tree does not constitute an independent entity, but is affected in every moment of its life by every other tree and minor plant of the entire forest, and in turn itself influences every other tree. The forest, therefore, constitutes an organism, having a united life different from, but dependent on, the life of its individual members. Within this

organism, a never ceasing struggle is going on, tree fighting against tree, species against species; while the entire organism carries on a warfare with other plant associations, such as the prairie and the bog, in which it is sometimes vanquished, sometimes victorious."

In another place Bruncken says that "as early as 1665 Edward Randolph was made surveyor of the woods and timbers of Maine at a salary of 50 pounds a year. The office seems to have been a sinecure, for at a later time Governor Bellamont said that Randolph "never did a sixpence work." In 1691 the office of "Surveyor-General of the Woods" was established, covering all the provinces of which Bellamont was Governor. At first Randolph held this place, but a few years later his successor, Bridges, entered on a quarter century of what the colonists considered "pernicious activity." His duties were to see that no masts were exported without a license; that no waste of timber was permitted, and especially that no trees reserved for the royal navy were cut. In the various grants of land by the government provisions were usually inserted reserving all pines of 24 inches in diameter at 12 inches from the ground. The penalty for cutting a marked tree was 100 pounds. These rules and regulations were resented by the colonists, and even as early as 1691 the people refused to be restricted by such limitations. They had left Europe to get rid of paternalism, and ever since individualism has had unlimited sway in this country.

It would require too much space to quote even a few of the many interesting things in this book. It is the best book of its kind in this country, and should be carefully read by every person interested in the subject of forestry.

AMERICAN POEMS OF NATURE.

In these days of many verses and few poems, really good collections of nature poems are things to be desired and welcomed when they come. Considering the annual output of verses of this class, both machine made and hand carved, I have often wondered why the lovers of such things do not oftener gather them into collections and publish them.

There are many verse lovers who will regard Miss Marble's "Nature Pictures by American Poets" as an admirable collection; which it is. It betokens, on the part of the editor, a poetic temperament of the most refined type; one which delights in verses of quiet beauty and depth of poetic feeling, rather than in those of strength and fire. For instance, into her section of "Bird Notes and Crickets' Chirp," she admits no bird larger than a robin, nor one

more bloodthirsty than a jay. The quadrupeds, which have teeth and claws, and legs to kick with, are barred out, *en masse*. This is Miss Marble's privilege, but many readers will be likely to consider her selections rather tame; which to me is what they are.

This is distinctly a woman's book of Nature verses. To most men, it is a weak and incomplete "Nature," which totally lacks game birds, birds of prey, the fishes that are best worth knowing, and the whole ruck of quadrupeds, good and bad. But we are not all alike, and Miss Marble will have her full complement of sympathetic readers. The manner in which the contents of her volume have been classified and indexed for ready reference, shows a practiced hand, and adds materially to the permanent value of her work.

"Nature Pictures by American Poets." Selected and edited by Miss Annie Russell Marble, A.M., 12mo, pp. xiii.-205. The Macmillan Company, New York. \$1.25.

"Muscle, Brain and Diet," by Eustace H. Miles, M. A. (Cambridge), is a strong plea for simpler foods. Mr. Miles urges the use of these, not only because they are cheaper, but because they give better results for strength, health, power and happiness. It is interesting to note that Mr. Miles' own experience causes him to endorse wheat products, milk, fruits, nuts and vegetables rather than meat. He protests against the use of stimulants and recommends eating lightly. Valuable menus and recipes are given. The work is somewhat marred, however, by excessive use of italics. Published by The Macmillan Co., New York.

"Golf: A Royal and Ancient Game," is an elaborately illustrated and handsome volume, treating of the subject from every possible point of view. Some of the most interesting and important chapters are those giving the history of the game, those relating to the St. Andrews and other noted golf clubs, Acts of Parliament governing the game, ancient ballads composed in its honor, and the rules by which it should be played. Published by The Macmillan Company, New York; price, \$2.

"Notes on Sport and Travel," by George H. Kingsley, with a memoir by his daughter, Mary H. Kingsley, covers ground from a Southerland Hillside to New Zealand and Colorado, the author having hunted and fished in all lands. His descriptions of life among the sharks and whales and "The Last Salmon before Close Time" are particularly delightful. The Macmillan Company, New York; price, \$3.50.

EDITOR'S CORNER.

RECREATION desires to be of the greatest possible service to its readers in every way. You are therefore invited to ask this office for any information you may want, on any subject whatever. If I cannot answer directly, I will endeavor to get the information, and reply at the earliest possible moment.

More especially if you are planning a hunting or fishing trip anywhere in the United States, Canada, or Mexico, let me know and I will tell you all that can be learned about the fish or game to be found in any such region, and as to the best means of reaching your objective point. In nearly every case, I can put you in correspondence with subscribers who live in the district in question.

If you do not see what you want, ask for it.

To All League Members:

Gentlemen:

I congratulate you most heartily on the fact that the Lacey Bird Bill has passed the House of Representatives by a large majority. In fact, there were but 23 votes against it. For this the League owes a debt of gratitude to the Hon. John F. Lacey, which I trust we may be able to discharge in some measure in the near future.

The bill is now in the hands of the Senate Committee on Interstate Commerce, of which the Hon. Shelby M. Cullom is chairman.

It now becomes our duty to take up the work there and to push it to a finish. The millinery people made a stubborn fight against the bill in the House, and will no doubt carry it into the Senate. There are indications that the Railway and the Express companies will also make a quiet but effective resistance. The greatest danger is that an amendment may be tacked on the bill in the Senate, when it would have to go to a conference committee of the 2 houses. There it would be buried and no further action taken on it at this session.

It is now the duty of every member of the League to write, first, to Senator Cullom, and then to all the other members of the Interstate Commerce Committee (see list below), urging a speedy and favorable report

on the bill. Then you must write the Senators from your State, imploring them to act favorably on this bill, and to resist any attempt to amend it.

Here is a list of the names of the Senate Committee on Interstate Commerce:

Shelby M. Cullom, of Ill.
Wm. E. Chandler, of N. H.
E. O. Wolcott, of Colo.
N. W. Aldrich, of R. I.
J. H. Gear, of Iowa.
S. B. Elkins, of W. Va.
John Kean, of N. J.
Wm. Lindsay, of Ky.
Horace Chilton, of Texas.
B. R. Tillman, of S. C.
Wm. V. Allen, of Nebr.

Delays are dangerous. There are some thousands of bills pending in the Senate and probably not more than one in 50 will be acted on at this session. You therefore see the urgent necessity of doing everything possible to secure immediate action on Mr. Lacey's bill. With such measures as the Nicaraguan Canal Bill, the Army and Navy Personnel Bill, the various Puerto Rican, Cuban, Alaskan, Hawaiian and Philippine measures, and the Presidential conventions engrossing the minds of the Senators, you see there can be little hope of securing action on our game bill unless an overwhelming appeal is made for it.

In writing your Senators, tell them the bill has been carefully considered in the House; that all objectionable features have been eliminated; that it has been amended in the interests of the millinery trade as far as we are willing it should be, and that there is no occasion for further changes or for prolonged discussion. It can be passed in 10 minutes, under a suspension of the rules, if we can get unanimous consent for this; and we can get it if all members of the League will do their duty *at once*.

The bill is known as House Bill 6,634. Mention it thus when writing.

Do not neglect this important duty. Act on it now, and we shall win.

G. O. SHIELDS, President.
New York, May 3, 1900.

PUBLISHER'S NOTES.

THE HUNTING SEASON IN ONTARIO.

The Highlands of Ontario include the 30,000 islands of the Georgian bay, the Muskoka Lakes district, the Lake of Bays district and the Magnetawan river. They are reached by the Grand Trunk Railway system. During the first 2 weeks of November, 1899, the open season, the express companies alone carried 2,032 carcasses of deer out of the Highlands, weighing in the aggregate over 200,000 pounds. The returns show that 3,559 deer hunting licenses and 2,065 settlers' permits were issued. These figures are largely in excess of those for 1898. It will be observed that 5,624 deer hunters were in the woods during the 15 days in which deer could be legally killed in Ontario. Allowing one deer to each license and permit holder is giving a low average, as many clubs and hunting parties secured their full quota of 2 deer for each member. The number of deer carried by the express companies can not be taken as a criterion of the total number killed. Those killed by settlers are not shipped; and a large number of hunters from inland towns and villages, adjacent to the hunting grounds, have the deer killed by them taken to their respective homes by teams. It is therefore safe to estimate that 6,500 deer were killed during the last season in the hunting confines of Northern Ontario. One would think this would cause a diminution of deer, but such is not the case. Each successive year seems just as good for the sportsman as the preceding.

The Grand Trunk Railway photographer secured negatives of the best scenes possible in the wilds of the forests, and the result was most gratifying. Among them are interior and exterior views of hunters' shacks, the results of the chase, and several views of herds of wild deer which were taken with telephoto lens, at a distance of a mile from the object. These pictures have been enlarged from small 8 by 10 negatives to 21 by 31 inches, and the Grand Trunk intends having them on exhibition at its different ticket offices in all the large cities of America. The collection will be well worth seeing, as it is considered the finest series of hunting pictures taken with the camera.

A. T. R., Montreal.

THE AL-VISTA SWINGING LENS.

The Multiscope and Film Co., Burlington, Wis., has issued a catalogue of its Al-Vista Panoramic Cameras that will surprise any and every photographer who

may be fortunate enough to get a copy of it.

The Al-Vista has a swinging lens by which it is possible to make a photo of a regiment of troops passing up the street while the operator stands within a few feet of the center of the regiment. At first the lens looks away up the street to the left, say, at the head of the regiment, and on pressing the button it swings from thence clear around to the right, say, in such a way as to look at the rear guard, which may be 2 or 3 blocks down the street.

This new catalogue shows half tone reproductions of a number of pictures, made in this way, that seem to cover an area of a mile or more from left to right, while the objects in the center of the picture appear not more than half a mile away. One of these shows Niagara Falls, the scene including both the American and the Canadian falls, Goat Island and a portion of the American shore.

Another view shows a wide spread of the rapids. It would require at least 3 exposures from a 5x7 camera on the same subject, the prints pasted end to end and taken from the same point of view, to get the same scope of land and water that is shown in this picture.

There are numbers of other pictures in the book, of equal interest and value to amateurs. Then there is a full description of the mechanism and the plan of the camera, together with complete instructions for operating it. If you want such a camera write for a copy of this book. Unless you can afford to buy the camera then I would advise you not to write, for you are sure to want it as soon as you get through examining the catalogue. Mention RECREATION when you write.

THAT WHIRLING TWIRLING ATTRACTION.

If there is anything that really touches the heart of an angler it is to furnish him a bait that will never fail him; one he can depend on. That is just what The P. & S. Ball Bearing Troll and Casting Baits were made for—to be depended on. When a man goes fishing he wants fish. So does a woman. If they don't get them their sport is all up. They may have a \$100 rod, a \$20 reel and a \$5 line, but the catch all depends on the bait that is on the end of the line. The P. & S. Ball Bearing Baits are the ones that get the strikes, arch the rod and make the reel sing. They are the source of your whole pleasure. They merit your confidence. Equip yourself with P. & S. Baits and the off days and no luck

will vanish from your experience. These baits are always ready, always playing and never dead. Catalogue *D* for 1900 will be gladly sent to any address, and it is filled with good things for all who are interested in the art of angling. Half tone cuts and articles on pike, pickerel, trout and bass fishing, by eminent writers, are among the many attractions. Send a 2 cent stamp for postage; or, better yet, enclose money order for 65 cents for Style M Bait and Catalogue *D* will go with it. This is called the King of all Baits. Write the P. & S. Ball Bearing Bait Co., Whitehall, N. Y., and your order will be quickly filled.

WHERE RUNS THE NEW YORK CENTRAL.

WILLIAM I. LAMPTON.

Where the mild Mohawk meanders,
Where the lakes and pleasant streams
Among the vales and mountains,
Lie still in silver dreams;

Where the touch of Nature's kindness
Comes down upon the earth,
To paint the smiling landscape
In scenes of radiant mirth;

Of laughing brooks and meadows,
Where daisies come between
The sunshine and the shadow,
That glorify the green;

Where the mountains in the distance
Sleep silent all the day,
In purple robes of morning,
In twilight robes of gray;

Where hamlet, town and city
Thrive as the green bay tree
Beneath the fostering care of
The only N. Y. C.;

There every man is happy,
There every woman, blest;
They simply press the button,
The Central does the rest.

ANOTHER MAN WHO LIKES HIS PAGE FENCE

New York, Dec. 1, 1899.

Page Woven Wire Fence Company,
Adrian, Michigan.

Gentlemen:—Yours enclosing bill for \$208.95 for Page Fence at Bedford Park came duly to hand.

I send you herewith check to cover same, and wish at the same time to express my gratification with the fence. I have been much pleased with the transaction from the outset. Despite the difficulty of getting material, it was delivered promptly. Your representative, who had charge of the work, handled it very well, erecting the fence promptly, and apparently taking a pride in seeing that it was well done. The fence when completed was all you had prom-

ised for it, and is much more agreeable to the eye and satisfactory in every way than I had dared hope. We are all much pleased with it, and desire, when the front line of our property is determined by the opening of Woodlawn road, to extend the fence entirely around the place.

Yours very truly,
W. W. NILES, JR.

The Gold Medal Camp Furniture Company, of Racine, Wis., has again placed an ad. in *RECREATION* and invites the readers to call for its catalogue.

As I have frequently said, these people make a line of the most comfortable and even luxurious camp beds, chairs and tables ever put on the market. They are staunch and well made, and yet are so light that a whole outfit for 6 men can be stowed away in the bow of a boat or under the seat of a wagon, and will not weigh more than 50 to 60 pounds. I have carried a Gold Medal camp bed on the hurricane deck of a cow pony thousands of miles. It has saved my bones many an ache, and has enabled me to enjoy many a good night's rest where otherwise I would have spent hours lying awake and wishing for a good bed.

Write for a copy of the catalogue and then order some of the goods listed in it. You will agree with me after having seen them.

Charles S. Lee, G. P. A. of the Lehigh Valley Railroad Co., Havemeyer Building, New York, has issued a beautiful folder entitled "The Lehigh Valley Railroad as Seen from the Trains." It contains a unique bird's-eye map of the route and a number of beautiful half tone pictures of scenery along the line, together with a great deal of valuable data regarding the principal towns and resorts. Anyone looking for a cool, sylvan spot in which to spend the summer months would find much of interest in this folder. If you write for it mention *RECREATION*.

H. H. Kiffe & Co.'s 1900 catalogue, spoken of in May *RECREATION*, is out and is a corker. It is one of the most complete of the year, and contains price lists and illustrations of everything a sportsman could possibly want for his camp or his home. If you have no copy of it write for it and say you saw it mentioned in *RECREATION*.

Mr. Arthur W. Savage, manager of the Savage Arms Co., is at the Paris Exposition, in charge of the Savage guns exhibit. No doubt hundreds of European sportsmen will avail themselves of this opportunity to buy high grade American rifles.



PURE WHISKEY

*Direct from Distiller
To . . . Consumer*

FOUR FULL QUARTS

for \$ 3.20

EXPRESS PREPAID By US

**SAVES MIDDLEMENS PROFITS
PREVENTS ADULTERATION**

Since 1866

Hayner's pure double copper distilled Rye Whiskey has been sold to Consumers direct from our own Distillery, known as "Hayner's Registered Distillery No. 2, Tenth District, Ohio." No other Distillers sell to consumers direct. Those who offer to sell you whiskey in this way are speculators who buy to sell again, on which plan they are compelled to add a profit, which you can save by buying from us direct.

We will send four full quarts of Hayner's Seven-Year-Old Double Copper Distilled Rye Whiskey for \$3.20, express prepaid. We ship on approval in plain, sealed boxes, with no marks to indicate contents. When you receive and test it, if not satisfactory return it at our expense and we will return your \$3.20.

Such whiskey as we offer you for \$3.20 cannot be purchased elsewhere for less than \$5.00, and the low price at which we offer it saves you the addition of middlemen's profits, besides you are guaranteed the certainty of **pure** whiskey, absolutely free from adulteration.

REFERENCES.—Third National Bank, Dayton; State National Bank, St. Louis, or any of the Express Companies.

WRITE NEAREST ADDRESS

THE HAYNER DISTILLING CO.,

226-232 West Fifth Street, DAYTON, O. 305-307 S. Seventh St., ST. LOUIS, MO.

N.B.—Orders from Ariz., Col., Cal., Idaho, Mont., Nev., N. Mex., Ore., Utah, Wash., Wyo., must call for 90 qts. by freight, prepaid.

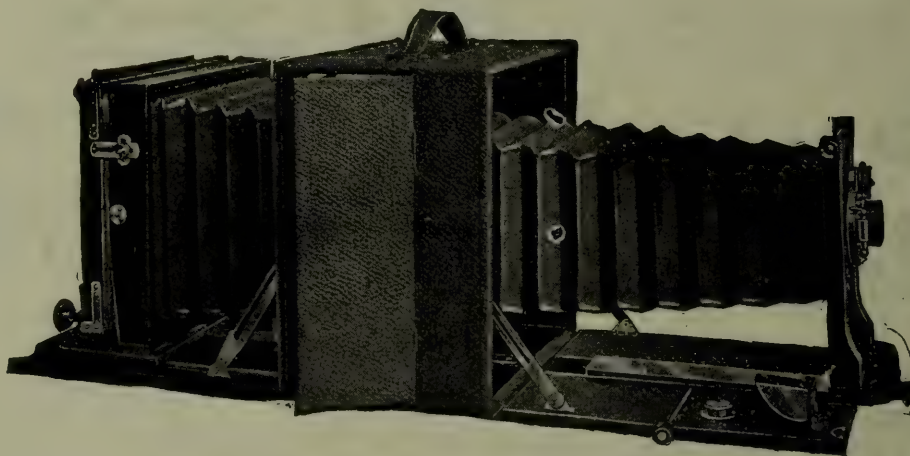
I guarantee the above firm to do as it agrees.—EDITOR.

a Wizard Camera

Your Vacation
Is Incomplete
Without one



Is the Best
For General
Work



a Wizard

is the invariable choice of the fastidious.

No matter how much or how little you may want
to spend on an outfit, you cannot afford to buy
without consulting the : : : : : :

WIZARD  
CATALOGUE

which is to be had for the asking : : : :

Prices, \$5.00 to \$80.00.
Quality, Always the Best.

Manhattan Optical Co. of N. Y.
Cresskill, N. J.

AMATEUR PHOTOGRAPHY.

"A Bird on the plate is worth 2 in the bag."

AND NOW COMES THE 5TH COMPETITION.

RECREATION has conducted 4 amateur photographic competitions, all of which have been eminently successful. A fifth will be held, which, it is believed, will be far more fruitful than any of the others. It opened April 1st, 1900, and will close September 30th, 1900.

Following is a list of prizes to be awarded:

First prize: A Long-Focus Korona Camera, 5x7, made by the Gundlach Optical Co., Rochester, N. Y., fitted with a Turner-Reich Anastigmat Lens, and listed at \$85.

Second prize: A Reflex Camera, 4x5, made by the Reflex Camera Co., Yonkers, N. Y., fitted with a Goerz Double Anastigmat Lens, and listed at \$75.

Third prize: An Al-Vista-Panoramic Camera made by the Multiscope and Film Co., Burlington, Wis., and listed at \$40.

Fourth Prize: A Wizard C Camera, 4x5, made by the Manhattan Optical Co., Cresskill, N. J., with B. & L. Iris Diaphragm and Leather Carrying Case; listed at \$33.

Fifth prize: A Waterproof Wall Tent, 12x16, made by D. T. Abercombe & Co., New York, and listed at \$32.

Sixth prize: A Gold Hunting Case Watch, listed at \$30.

Seventh Prize: A Tourist Hawkeye Camera, 4x5, made by the Blair Camera Co., Rochester, N. Y., and listed at \$15.

Eighth prize: A Bristol Steel Fishing Rod, made by the Horton Mfg. Co., Bristol, Conn., and listed at \$6.

The 10 next best pictures will each be awarded one dozen 8x10 Carbutt Plates, made by the Carbutt Dry Plate Co., Wayne Junction, Philadelphia, Pa.

The 10 next best pictures will each be awarded one dozen 5x7 Carbutt Plates.

The 10 next best pictures will each be awarded one dozen 4x5 Carbutt plates.

Subjects are limited to wild animals, birds, fishes, camp scenes, and to figures or groups of persons, or other animals, representing in a truthful manner, shooting, fishing, amateur photography, bicycling, sailing, or other form of outdoor or indoor sport or recreation. Awards to be made by 3 judges, none of whom shall be competitors.

Conditions: Contestants must submit 2 mounted prints, either silver, bromide, platinum or carbon, of each subject, which, as well as the negative, shall become the property of RECREATION. The name and address of the sender and title of picture to be plainly written on back of each print. Daylight, flashlight or electric light pictures admissible. Prize winning photographs to be published in RECREATION, full credit being given in all cases.

Any number of subjects may be submitted.

Pictures that may have been published elsewhere, or that may have been entered in any other competition, not available. No entry fee charged.

Don't let people who pose for you look at the camera. Occupy them in some other way. Many otherwise fine pictures have failed to win in the former competitions because the makers did not heed this warning.

THE CHICAGO SALON OF PHOTOGRAPHIC ART.

GENE S. PORTER

The first Salon of Photographic Art was held in Philadelphia, in '98; the second in Chicago, April 3d to 18th, 1900, in the Art Institute. This was under the joint management of the Chicago Society of Amateur Photographers and the Art Institute. The Committee of Selection was composed of Alfred Steiglitz and Joseph T. Keiley, of New York; Eva Lawrence Watson, of Philadelphia, and Clarence H. White, of Newark, Ohio.

The honor of having a photo hung was the only award. The amateur work was placed on the walls of one large room, and that of the Committee of Selection in a smaller room alone. The walls of the amateur room were covered with palm green burlap, and of the committee room with dull red. The framing of most of the pictures gave evidence of being home work, or, at least, of having been done under the direct supervision of the artists, and in nearly every case was appropriate and artistic. Among the mounts, shades of gray predominated, with some tans and greens, and in one or 2 cases, dull reds. The print paper was all Aristo, Velox or some of the rough, dull finish papers, and glass was used in every instance except one.

One thousand pictures were sent in, and 160 of them were hung. Forty of those chosen were the work of the Committee of Selection, and the remaining 120 the work of 44 amateurs, some having one each and some 10, the full number allowed one person. That the work of only 44 amateurs should pass muster out of the hundreds represented proves there was careful sifting; yet, why many of them were chosen I could not understand. Neither could I find anyone so high in the realms of sculpture, painting or photography that he knew. If the work on the rejected photos was worse than that on a goodly number of those that were hung, many amateurs are laboring in vain.

The work of Chicago amateurs was accepted in only 4 instances: William B. Dyer, 10; William Page, 4; Louis Lamb and Mary H. Beman, one each. I was repeatedly told that Chicago amateurs felt very sore, as even the work of T. George Hislop, president of the Amateur Society, was rejected. New York had 7 representatives; Boston, Philadelphia, Buffalo, Washington, Detroit and many lesser cities were represented; while Ohio carried off the palm with the work of 8 amateurs accepted, Akron having 3, Newark 2, Marietta one, and Zanesville 2.

The exhibit was the finest ever shown in America. Some of the photos were so true in values, so perfect in line, so com-

plete in composition, so delicate in lighting and so skillfully executed that they seemed above criticism, as, for example, "The Manger," by Gertrude Kasebier, of New York. Some were so badly composed, so out of focus, so lacking in tonality and atmospheric effect, and so dimly printed, that it was impossible to understand their acceptance; for example, "The Frost Covered Pool," by Eduard J. Steichen, of Milwaukee.

Four points were strongly emphasized in the exhibition. The first was an attempt to photograph the nude. I regard this as deplorable. Nude models posed about forest or stream are absurd, unnatural and out of place.

The second point was lack of good composition. No picture is worthy of a place in such an exhibition that is not perfect in composition. A number of pictures were hung on the merits of lighting and detail that should have been inadmissible for their miserable composition. A forcible illustration of this was a picture split squarely in the middle from top to bottom by a large tree. In "The Frost Covered Pool," before referred to, 4 bare saplings, cut off below any sign of limbs, divided the plate from foreground to top into 5 vertical sections. All the rest was dirty factory-yard snow. The composition, line and balance of a picture should be mastered or no lighting, atmospheric effect or exquisite finish will save it.

The third thing to which I objected was the focusing. My objection was shared by some of the best painters and sculptors in the country. Many of the landscapes and even some of the figure studies were not in focus anywhere, and the condemnation was loud and deep, by both artists and sculptors. In many instances, what looked as if they might have been excellent portrait studies were so dim and indistinct as to be mere suggestions of one eye, a nose, and a lip.

A photographer has scarcely a right to ruin people's eyes in their efforts to fathom his motives. Why not set them forth plainly as to execution, and let the picture contain the mystery. It can be done, as witness "The Magic Crystal," of Mathilde Weil, of Philadelphia. This picture was the best example of this class of work that I ever saw. It showed a woman's face sufficiently wonderful in contour, expression and arrangement of hair and drapery to set one guessing. In her hands she held a crystal globe. Her pose was striking, and her face was full of her story. What it was no one knew; but she caught every passer, held him in a brown study and sent him on, guessing. There was mystery, a weird, uncanny, unusual story, which was interesting.

My fourth general criticism on the display is of the retouching of negatives and painting of prints. There was little of these in the portraits, but in the landscape and figure studies it was done to death.

Several lectures were delivered by noted artists and sculptors. The former emphasized the importance of good composition and values, while the sculptors dwelt on the beauty of lines.

SALON NOTES.

Not one picture admitted to the Salon showed a well defined cloud. There were simply suggestions of a cloud mass, atmospheric effect, and gradation of light and shade.

The pictures were generally small, some only 2½ by 3 inches. "The Net Mender," by Steiglitz, was about 1½ by 2 feet. In almost every instance they gave evidence of being the choice part cut in an artistic shape from a large plate. The favorite size seemed to be 4 by 11, hung in panels or horizontally, as suited the subject.

Prices ranged from \$3 to \$150; the average price being \$50. Some of the pictures were not for sale at any price.

The picture hung in the place of honor in the amateur room was "The Manger," by Gertrude Kasebier, of New York, price \$100. This showed a Madonna and child. The woman was seated on a rough board bench in a stable; coarse planking and a manger formed the background; splintered, stained boards were under her feet. The light fell strong from a narrow slide window to her left. Her drapery was white, and the baby form in her arms was wrapped in white. Over the woman's head, over her body, and the child, down to the floor on the right, fell a snowy, misty sheen of gauze veiling. On the left it was caught in the curve of the knee in lines to charm a sculptor, thence falling to the floor. Through this delicate sheen of holy whiteness the woman's form, drapery and the outline of the child, with its little round head in the nook of her arm, were visible. The composition, posing, drapery and lighting were almost perfect. The picture well deserved the place of honor it held, and I should love to own a copy of it.

Virginia G. Sharpe, of Philadelphia, enjoyed the rare distinction of having one of her Salon pictures. "The Head of a Young Girl," bought by the Art Institute of Chicago. That was an honor of which she may well be proud.

The collection of Joseph T. Keiley, of New York, contained 3 Indian heads, valued at \$75 each, that were the finest typical Indian heads I ever saw. Mr. Keiley's work was all good, his "Duke of Otranto," valued at \$100, being especially well liked.

Oscar Maurer, of San Francisco, in "The

Storm," taken near Mexico City, had secured a fine atmospheric effect.

The best picture of Clarence H. White, member of Committee of Selection, of Newark, Ohio, and one of the gems of the Salon, "Ring Toss," was sold to Mr. Steiglitz.

"The Loving Cup," by Frederick J. Von Rapp, of Philadelphia, was a fine study. The subject was a common, every-day woman, in ordinary clothes, but so naturally and gracefully posed as to destroy all effect of pose, which is the height of art.

In all the mass of foreign faces, figures, backgrounds and drapery, when one found an American woman, the eye clung to her lovingly, as in the picture of Mathilde Weil, of Philadelphia, "The Embroidery Frame." She was such a nice, every-day girl, and so admirably posed it was a pity the values were not better.

"The Coke Burner," by John G. Bullock, of Philadelphia, was one of the most popular pictures in the Salon.

"The Bar Maid," by Mary R. Stanberry, of Zanesville, Ohio, was another. The composition and values in this picture were especially good.

A PRACTICAL CLUB.

The Montclair (N. J.) Camera Club is a prosperous and growing organization. It has a large membership composed of the best people in that enterprising town and the best equipped club rooms I have ever seen, outside of a few of the large cities.

Here is an extract from a circular the club sends out that contains many valuable suggestions for other camera clubs:

"It costs \$12 a year for membership. What do I get for my money?"

You get that association with men of a like ideal which affords the best opportunity for growth and development. By interchange of ideas, by helpful talk and criticism, by comparison with others' work and observation of their methods, increased knowledge and improvement of one's own work are easily and pleasantly attained.

At our club rooms are all the mechanical necessities: Dark room, acid bath, washing baths, graduates, trays, place to dry plates and prints and to trim and mount prints, enlarging camera, with arc light attachment for making lantern slides and enlargements, day or evening, facilities for portrait work, and a good selection of photographic journals. Plates, printing papers and developers are for sale at the club rooms.

At the club meetings, 10th and 25th of each month, talks on subjects of interest

are given and frequent exhibitions of prints and lantern slides. This club is a member of the Lantern Slide Interchange, from which we receive, monthly, sets of slides showing the best amateur work, in widely varied lines.

At our club exhibitions and competitions, open to all our members, our own best work is shown.

Club outings are had as opportunity offers.

Visiting and resident amateur photographers are cordially invited to attend the meetings of the club.

Following is a list of the officers of the club: President, J. S. Gibson; Vice-President, Dr. J. S. Brown; Treasurer, W. W. Ames; Secretary, Arthur Haller; Chairman House Committee, Charles R. Pratt; Chairman Lantern Slide Committee, Albert O. Miller; Chairman Membership Committee, C. M. Dutcher; Chairman Library Committee, Wm. S. Behr.

A GOOD GOLD BATH.

RED FIR.

Dissolve 15 grains of gold in 15 ounces of distilled water. Keep in a glass-stoppered bottle. Make a saturated solution of bicarbonate of soda and a saturated solution of borax, using distilled water. Put an equal quantity of both solutions in a bottle. If distilled water can not be had, use water that has been boiled at least 30 minutes, then cooled, and filtered through 2 thicknesses of filter paper.

To use: Take of the gold solution the number of ounces the paper you are using requires of grains. Remember each ounce of solution contains one grain of gold. If you are using Solio, for instance, the formula would be as follows:

Water	47 ounces.
Gold solution	1 ounce.
Alkali solution	80 minims.

Using 80 minims for each ounce of gold solution will give more uniform tones than a solution gauged by the litmus paper test. Use distilled or boiled water for washing prints while toning and after fixing, especially for the first 2 or 3 washings.

If you make your own solutions, buy your chemicals in small quantities, say enough to last a month, and make up only as much as you need at a time, except the stock solutions. If you buy your solutions already prepared, buy only what you need at the time and insist on their being fresh. By following this plan you will get better results and the expense will be no more.

I have used Tolidol for developing plates and films, and have produced negatives superior to these from pyro. Tolidol is the best for amateurs, as it does not stain the fingers. Can be made up in quan-

tities, as it keeps indefinitely, and can be used a second time for slow developing.

To prevent plates or films from frilling, wash them after they are developed; then immerse 2 minutes in a saturated solution of alum. Rinse well, and put into fixing bath.

If you want a camera to use away from home, buy a No. 2 Bull's-Eye Kodak. You will understand it more quickly and get better pictures with it than with any other camera on the market. Choice negatives from it may be enlarged to any desired size by the bromide process. I have one of these cameras that was in constant use 3 months on the Mojave Desert, and aside from the wear and tear of such a trip it is as good to-day as ever. Of the hundreds of pictures I took less than 5 per cent. were bad.

If you intend to work at home, and have taken photography up as a study and not as a "fad," get the best camera your means will permit. If you buy a Long Focus Korona with a rectigraphic or anistigmat lens you will not go wrong.

HOME MADE DRY PLATES.

The following formulæ are from Sir Andrew Pringle's work and are reliable: In order to make slow landscape and lantern slide dry plates procure the following articles: A pint stone or earthenware ink bottle, a thermometer, a piece of railroad canvas about 18 inches square, a pint bowl, coarse muslin $\frac{1}{2}$ yard, boiled, first; glass or slate slab, 12 inches by 24 inches, bone or silver teaspoon, for small plates, small quart tin dish, deep; small piece of fine lawn, boiled, and a $\frac{1}{2}$ pint earthenware jar. Make up 9 or 10 ounces of gelatine emulsion. That will coat about 6 dozen $3\frac{1}{4} \times 4\frac{1}{4}$ plates. Cleanse the ink bottle thoroughly and place in it:

Nelson's No. 1 (soft) gelatine...10 grains
Bromide potassium70 grains
Cold distilled water 5 ounces

Soak 30 minutes. Heat to 130 degrees Fahr. in hot water, using thermometer, and by shaking dissolve contents of bottle. Then add nitrate of silver, in crystals, 90 grains; shake and keep warm till silver is dissolved. Add iodide of potassium, 2 grains, and hydrochloric acid, 2 minims. Shake well. Place a cork in the bottle having a slot in side and place it in hot water. Boil 5 minutes, then cool gradually, and at 140 degrees Fahr. add 100 grains Heinrich's hard gelatine. Put this in bottle dry and shake till all dissolved. Then pour contents into a bowl to cool and place the bowl in cold or ice water. Let it stand 2 hours or until solid; then take a silver knife or fork and break up the mass into small pieces. Have ready a gallon crock

$\frac{1}{2}$ full of cold water; place gelatine pieces or shreds in center of your piece of railroad canvas, or a very coarse muslin; gather it up and around the mass, and, holding it in your hands, immerse the canvas in water in crock till all the cold gelatine has been squeezed through. Let it settle. Pour off nearly all the water and, placing the canvas over another crock or funnel, pour the shreds on it and repeat the operation; or add a new supply of water to the precipitated gelatine, stir, pour off water, let settle, and repeat this several times, till the shreds of gelatine have had 4 or 5 thorough washings. Then collect the shreds on a piece of muslin, squeeze out the water and place the mass in a small $\frac{1}{2}$ pint jar. Put this into warm water at about 100 degrees and melt it. It is then ready to coat plates. Level previously the slab by means of wedges and a level. Hold glass plate to coat in left hand and pour on it a teaspoonful of the melted emulsion. Carefully flow back and forth till plate is covered. Then place on slab to set. Do this till many coated. When gelatine is well set place the plates on shelves in a drying closet or beech-eaten light box to dry.

E. M. Huffnagle, Belmar, N. J.

THE PHOTO DEALER AGAIN.

- I was much interested and amused by an article in the January number of *RECREATION* under the heading of "Photo Dealers," etc. I had also noticed, in a previous number, an advertisement by a taxidermist in regard to photographing his subjects. Being a taxidermist myself, I resolved to buy a camera and try to do the same. I went into a photo dealer's store and asked to see some 4x5 cameras. I explained to him exactly what I wanted the machine for, and wanted him to give me one that would photograph single objects, such as birds, heads, etc., in my line of work. Yes! he knew exactly what I wanted. He sold me a small box of a camera, which would focus everything in a room except the main object I wanted. At the same time I had asked him to give me the necessary chemicals for the production of a picture. I quite agree with our contributor about dealers who sell unnecessaries for a novice. He gave me about 10 pounds of hypo, a big bottle of pyro, and any number of dishes I could not use. I paid a bill of \$15, with no discount. At the time of buying I stated to him that I was a greenhorn at the game, and asked him to show me just how to focus, develop, etc. I followed his instructions in every detail, with the most dismal results. I soon got tired of that kind of work, resolved to give the whole thing up, thoroughly disgusted, and

sell the camera for what I could get. I could easily have built a conservatory with the plates I had spoiled at 55 cents a dozen.

One day I accidentally met a professional photographer and I put my troubles before him. He examined the camera and told me it was hardly adapted for my class of work. He suggested an alteration, however, which he thought would meet my needs, and it did. I now get good results every time with my 4x5 lens. Nine out of 10 people think my photos are taken with a cabinet lens, because I can fill a 4x5 with an animal's head sharp and clear all over. I advise novices to go to a practical man, who will usually help them out. I do all my work now myself, up to a finished picture in my album, with no thanks to the photo dealer. Some of my subjects are difficult to photograph, having non-actinic colors in their plumage.

A. Learo, Montreal, Can.

HOW TO WASH PRINTS.

I have been much pleased with the recent enlargement of the photo department in *RECREATION*, for there is surely more to be hunted with a camera than with a gun, though I love my gun as much as I ever did.

I notice in March *RECREATION* that F. R. Woodward wants a hint on how to wash prints without paying them much attention. Assuming that running water and a wash bowl are at hand, the accessory apparatus consists of a soft rubber tube about 1½ feet long and ¼ of an inch inside diameter, and a piece of wire screen. Attach the rubber tube to the faucet, or source of water supply, and pass the other end through the ring in the stopper, so the water enters at the bottom of the bowl. The ring must be of sufficient size so as not to cramp the tube. The wire screen must be bent cup shaped and placed over the holes near the top of the bowl. That is to prevent the prints from sticking over the drain and causing an overflow. Allow the water to run strong enough to cause a gentle motion among the prints, which will be thoroughly washed in ½ to one hour, according to their number. If no rubber tube is at hand, wind a clean strip of cloth around the faucet and allow it to hang down. That will prevent the water from falling directly on the prints. In the meantime get a tube somewhere. There are other good methods, but this is about as simple as any.

A. E. Midgley, Chicago.

TO KEEP OUT LIGHT.

I am a regular reader of your valuable magazine, but the part that particularly interests me is the section devoted to pho-

tography, from which I get many valuable hints. There are, however, some things that may require a little explanation, or, at least, they could be bettered. For instance, in the January number, in the article on magic pictures, bichloride of mercury is mentioned. Some people may not know that is commonly called corrosive sublimate. Perhaps a little warning in regard to its villainous nature would be as interesting as any other part of the article. In February *RECREATION* C. H. Bailey gives directions for taking 2 or 4 pictures on one plate. If he can use those slides and not fog his plates I should like to know how he does it.

I have used a 6½x8½ camera more or less, and I have to be very careful in drawing a whole slide; in fact, I have spoiled many otherwise perfect pictures in that way. One day my dealer showed me a sort of weather strip which kept the light out after the slide was removed, but if the slide was pulled out cornerwise the light would get in.

I am at present using a Pocket Kodak, and am surprised at the quality of work it will turn out. I took a moonlight picture of a recent snow, and as there was no wind I got a perfect view of all the trees which were in the field of vision. I exposed it 6 hours through an ordinary window.

C. F. Marble, Assinippi, Mass.

BLUE PRINTS.

Can you tell me how to make a cheap bellows for a copying or enlarging machine? Should also like to know of a way to make blue prints on envelopes and letter heads:

Clyde E. Brobst, Canfield, Ohio.

ANSWER

To describe the process of cutting and folding bellows would make a long article, and a number of drawings would be needed. Blue prints on envelopes, letter heads, checks, or any paper can be made as follows:

Prepare

A

Red prussiate of potash...6 grains
Water1 dram

B

Citrate iron and ammonia.8 grains
Water1 dram

When dissolved, mix A and B. Coat the portion desired with the solution, using a tuft of cotton, a brush or a sponge. When dry, the sensitized portion will be yellow. If coated in a small, irregular patch it will answer; otherwise, either a cut out or a vignette will have to be used. When printed till the shadows are rusty throw into water and wash till the whites are clear.—EDITOR.

SNAP SHOTS.

Where can I get orange gelatine to make a ray filter for cloud work?

Geo. Horder, Allen's Grove, Wis.

ANSWER.

Orange gelatine is used by all wholesale confectioners to wrap around bonbons. Several colors are for sale at the wholesale stores, among which are 2 or 3 shades of orange. No doubt any confectioner would be able to procure a sheet for you. Select the lightest shade. It is no trouble to make your own screen. Get an ounce of 10 per cent. collodion and add enough picric acid to color it the desired shade. Clean a glass—an old negative will answer—polish well, dust on some powdered talc, rub it on well till it barely shows; then flow on the yellow collodion. It will soon set, and will peel off the glass.—EDITOR.

I note in March RECREATION an inquiry from F. R. Woodward, of Lowell, Mass., for device for washing photo prints. I use a print washer invented and manufactured by D. Argerbright, of Troy, Ohio, that does thorough work. It takes up 18x24 inches space, and can be used wherever there is a hydrant. Keep prints in motion all the time and they can not stick together nor settle down. I can wash any number up to 250 4x5 prints at a time and not mar a print. In my W. W. P. E. exchanges I often finish that number and wash them at a single washing with that washer. The water is always fresh.

M. S. Wagner, Troy, Ohio.

I am an old reader of RECREATION and I have a strong kick to make, not against your magazine, but against the readers of the camera department. I should like to see that department grow. If all the amateur photographers would do their part we could add greatly to the value of the department. Let us exchange prints and ideas more freely with one another. I have a few good 4x5 prints of Florida scenes which I will exchange for Wisconsin river or Rocky mountain views. Hope to hear from other amateur photographers.

J. E. Scott, Colfax, Ind.

In your January number one of your subscribers asks for a formula for gum used in backing postal stamps. This is claimed to be the regular United States formula:

Dextrin	2 parts
Acetic acid	1 part
Water	5 parts
Alcohol	1 part

Mix the acid with water, dissolve the

dextrin in same, add the alcohol and mix thoroughly.

C. S. Richter, Buena Vista, Colo.

Would you kindly send to me an explanation of the process for printing pictures on linen, celluloid, wood, etc.?

Henry Reinhardt, Newark, N. J.

ANSWER.

For linen: Buy Morton's solutions from E. & H. T. Anthony & Co., 5th avenue and 17th street, New York. They are cheaper than you can make them and are accompanied by full directions. For celluloid and wood, send to Anthony for a book on carbon printing.—EDITOR.

A Reflex Camera, made by the Reflex Camera Co., Yonkers, N. Y., and listing at \$45, for 45 yearly subscriptions to RECREATION. This camera is made specially for the use of sportsmen and naturalists, for photographing live wild birds and animals. It is a boon to sportsmen, and if you ever intend to make pictures in the woods or in the mountains you should have one of these cameras.

An Al-Vista Camera, made by the Ampliscope and Film Co., Burlington, Wis., and listed at \$30, for 30 yearly subscriptions to RECREATION. This camera has a swinging lens, by means of which you can make a panoramic picture of a regiment of troops, a whole range of mountains, a great stretch of river, or anything else that is 1,000 feet to 10 miles long.

I have received the convertible ampliscopes which Mr. Nehring sent me, and have given them a fair trial. The little trouble I took to get the required number of subscribers is hardly enough to pay for the good results I have obtained by using these ampliscopes.

W. E. Kenney, Salem, Mass.

If I had taken the photo that won the first RECREATION prize I should send it to the best firm in the country, have it enlarged all I could to preserve detail, copy-right it, put it on the market, and then "not work at nothin' else," but "jes' set 'round and feel good all day."

G. S. P., Geneve, Ind.

Every amateur photographer should have an album in which to paste unmounted prints. I can furnish you a Snap Shot Album, listed at \$1, and holding 100 pictures, for 2 yearly subscriptions to RECREATION.

Should like to correspond with some amateur photographers relative to exchange, etc.

Geo. W. Harp, Brinley, O.

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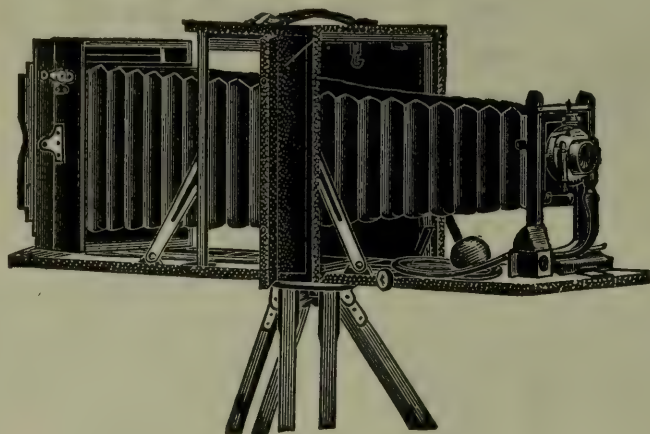
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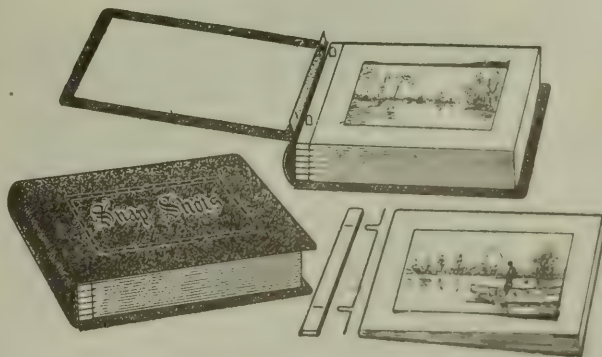
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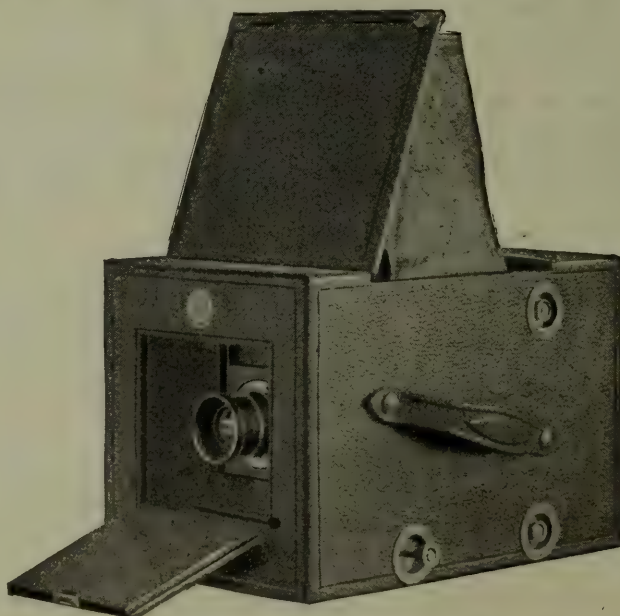
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New Patent Reflex Hand Camera,

in three sizes: 4 x 5, 5 x 7 and 6½ x 8½. The above print is a reduction from a 6½ x 8½ negative and corroborates what we said on another occasion in this

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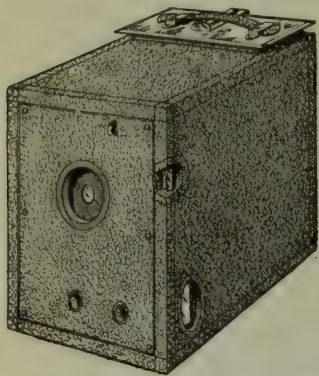
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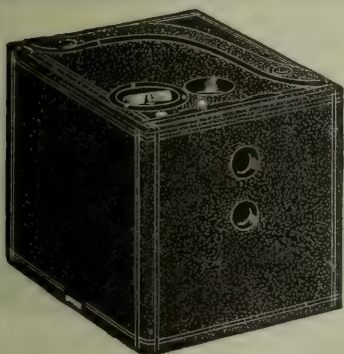
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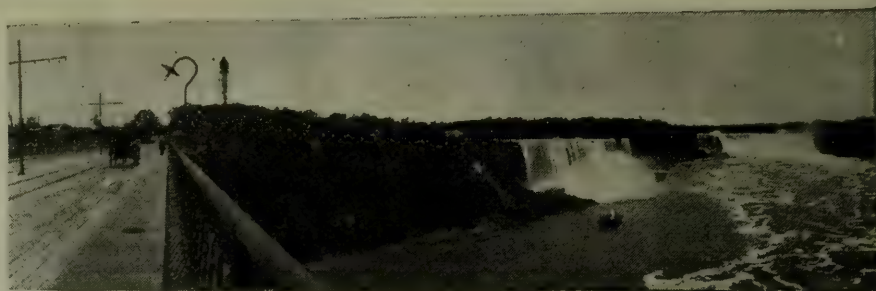
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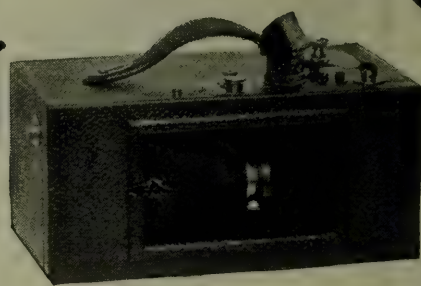
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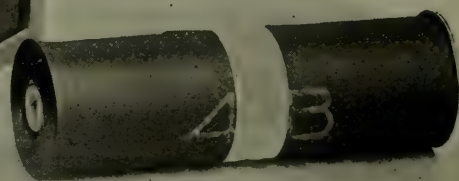
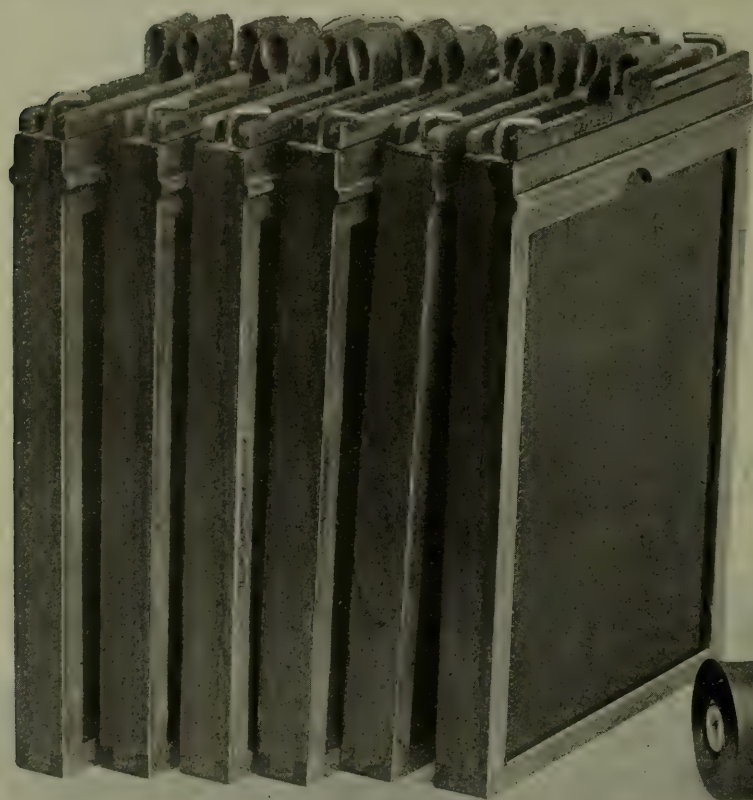
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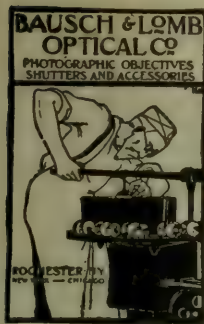
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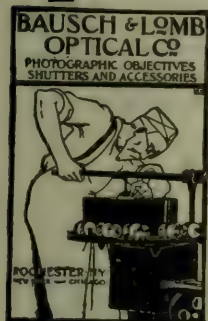
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Half a million cans supplied to the American and British armies. Reliable, always ready, and never spoils. The greatest improvement of the age in food products.

We will send a sample package on receipt of 15 cents to cover charges, knowing that after a trial you will include this food in your outfit.

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**The American
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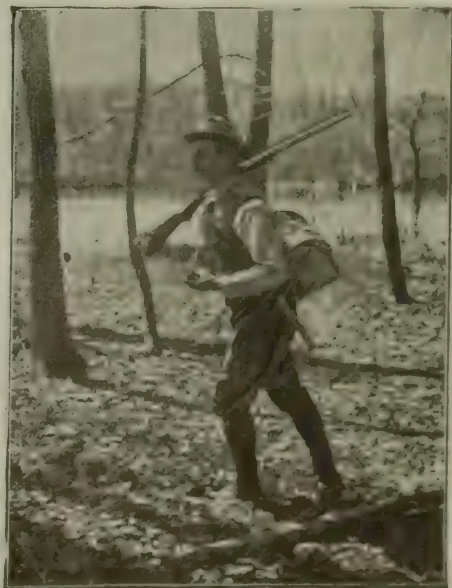
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These photographs give only a partial idea of how much labor and trouble the

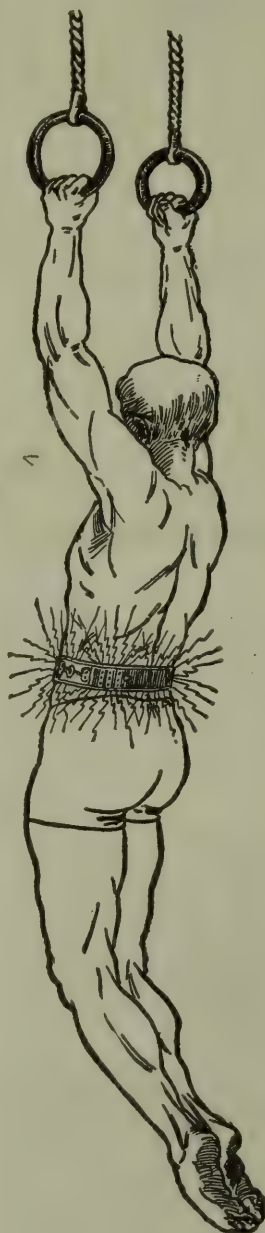
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will save you on a camping or prospecting trip.



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ELECTRICITY—The Fountain of Youth, the perpetual energy which sustains all animal life. It is the source from which springs the bubbling spirit of joy in young manhood. It is the vital element which keeps up the nerve force in old men to a grand old age. When the body is charged with it the vital powers are strong. Confidence flashes from the eye and the step is firm. Without it—well, how is it with you? Are you weak, gloomy, wanting physical and brain force? If so, you should begin at once using my famous appliance for weak men—The

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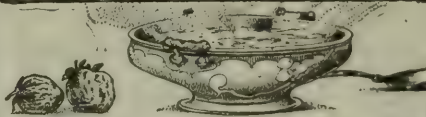
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In the pools by the alders, green,
The Mosquitos are folding their bills to die,
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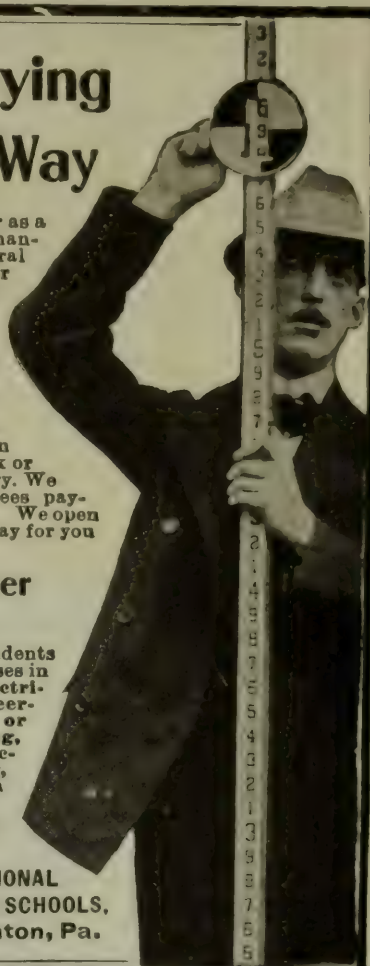
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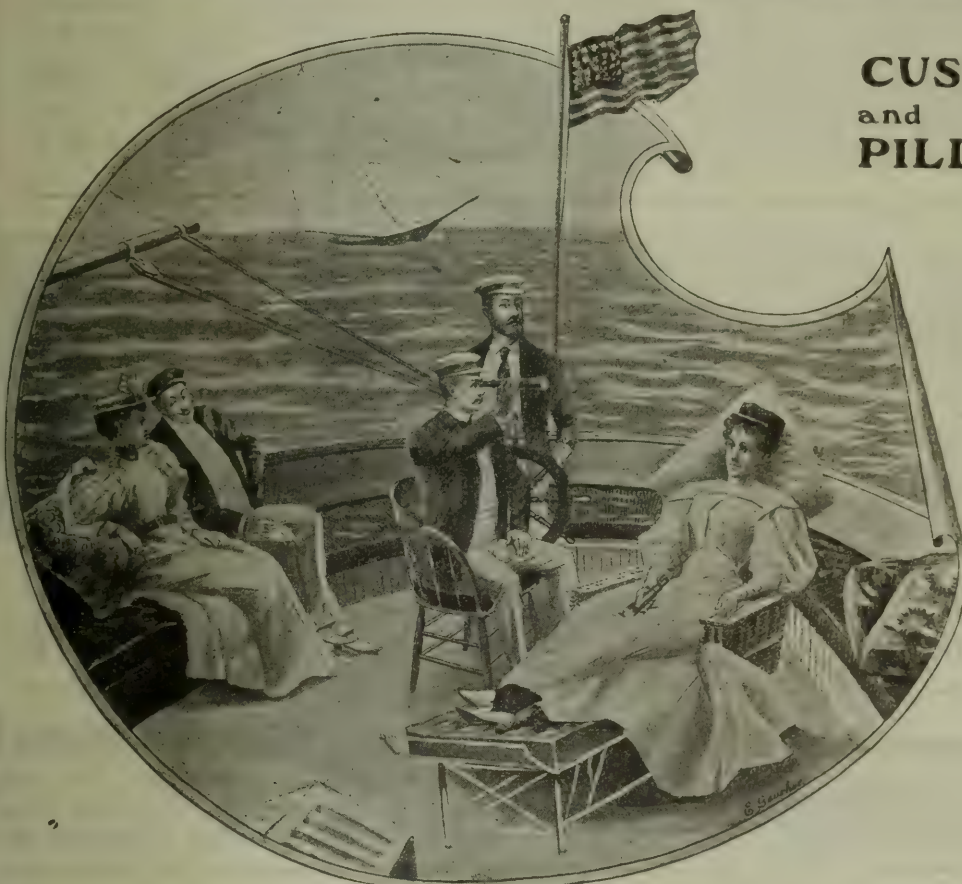
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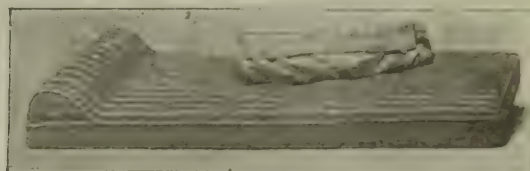
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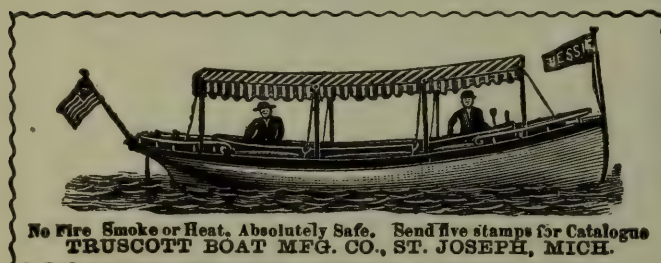
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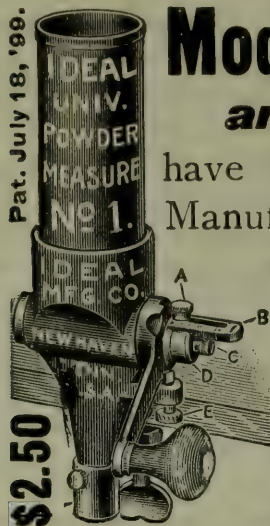
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Cut shows method of use
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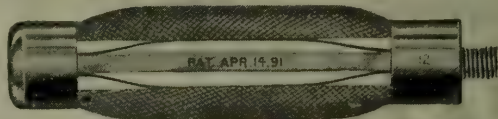


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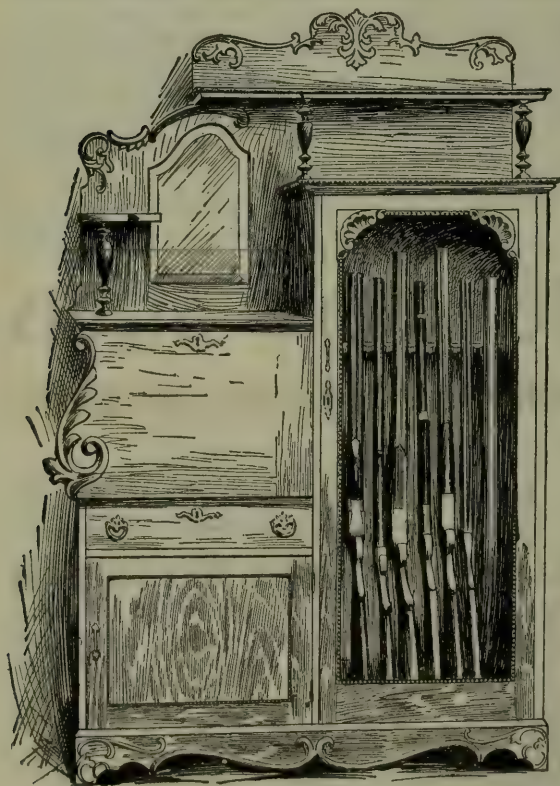
you must realize the importance of the care of it. We have the **only** tool needed to keep your gun in perfect condition. Our past 9 years of success prove this **positively**. Nothing will stop a gun from leading if you use it, as the friction on the barrel leaves a small deposit of lead. You can not stop this, but you can remove it by using a **Tomlinson** cleaner, and with a small amount of work. We (and thousands of others) claim **it will** remove all lead, rust or any foreign matter. **It will** not injure the barrel, as its 4 square inches of brass wire gauze are softer than the steel. **It will** last a life time, as its only wearing part can be replaced when worn (it will clean a gun a great many times for 10c per pair). **Tomlinson** gives you an extra pair of sides with each tool. **Remember** neglected lead and rust cause "pitts" and that means expense. We make them in gauges 8 to 20—fit any rod. All dealers sell them. Price, \$1.00. Send for a booklet of information and testimonials, and have your dealer show you the **Tomlinson**, or, we will send direct. You can use them in your "pump" gun the same as in a breech-loader.



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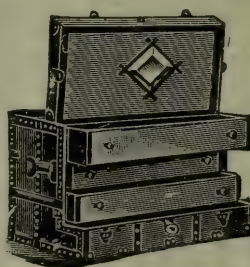
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Catalogue of 4 styles Free

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The **STALLMAN DRESSER TRUNK** is constructed on new principles. Drawers instead of trays. A place for everything and everything in its place. The bottom as accessible as the top. Defies the baggage-smasher. Costs no more than a good box trunk. Sent C. O. D., with privilege of examination. Send 2c. stamp for illustrated catalogue.

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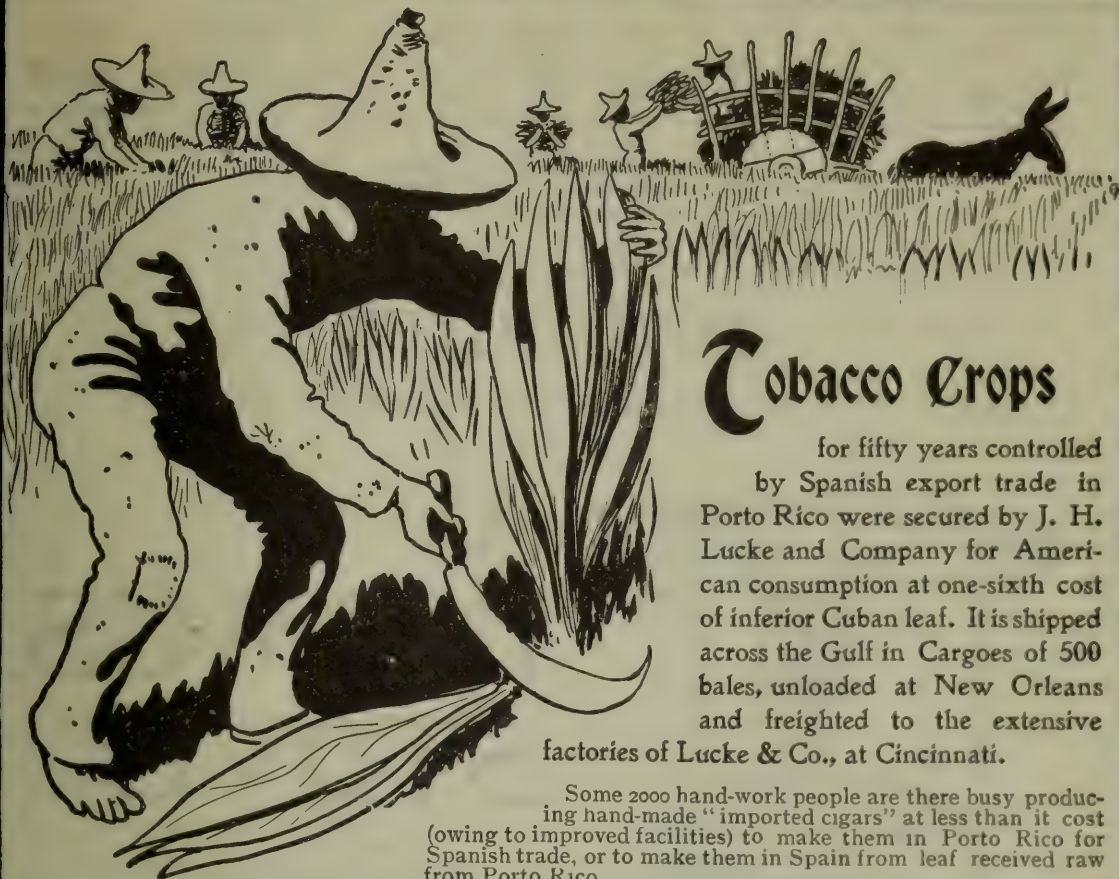
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This card is 10x12 inches in size, and is neatly printed in 3 colors.

Every member of the League who has an office, a store, or a shop, or who is employed in any such place, should have a copy of this card to hang up where all callers could see it. It would frequently cause inquiries about the League and cause discussion of it where otherwise it might not be mentioned.

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Will you have one of the cards? They are supplied free of charge.



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for fifty years controlled by Spanish export trade in Porto Rico were secured by J. H. Lucke and Company for American consumption at one-sixth cost of inferior Cuban leaf. It is shipped across the Gulf in Cargoes of 500 bales, unloaded at New Orleans and freighted to the extensive factories of Lucke & Co., at Cincinnati.

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for
\$1.25

Owing to their low price you will not realize or believe the delicious tastefulness of these goods until you have tried them. In order to give everyone the benefit of this extraordinary cigar value, a box of fifty will be sent express prepaid, to any address in the United States, upon receipt of \$1.25, which will be refunded to any dissatisfied customer. Remember they are a full weight, five inch luxurious smoke, good to the very end.

Address,

J. H. LUCKE & CO., LUCKE BLOCK, CINCINNATI, OHIO.

The Western Gas Engine Co. requests me to correct an error which appeared in their ad. in May RECREATION. It was there incorrectly stated that the cut shown was from a photo of their "Recreation" launch. The cut really represents one of their 25-foot racing launches, as will be seen by consulting their catalogue.

For Sale or Trade: 25 caliber single shot Winchester rifle, fancy stock and fore-end, checkered, Schuetzen butt plate, nickel plated, 30 inch half octagon barrel. Good as new. Wholesale price, \$31. Will sell for \$16.50 cash or trade for young English setter dog not less than \$25. in value.

F. F. Kanert, Grand Island, Neb.

For Sale or Exchange: One upright engine, 3 x 4, side feed lubricator, and 30 feet 3 inch belt; one horizontal automatic 3 x 4 high speed engine with governor in fly wheel. Both new. What have you in exchange? Geo. Burkhardt, 110 Baitz Ave., Buffalo, N. Y.

For Sale or Exchange: One Baker hammerless gun, cost \$35, 12 gauge, weight 7 1/2 pounds; also pair 7 power field glasses. Will exchange for a pair of Stereo Binoculars, 10 or 12 power. Address

Lock box 344, Seneca Falls, N. Y.

For Sale: Large buffalo robe, fine dark color, from buffalo killed and given to present owner by Sitting Bull

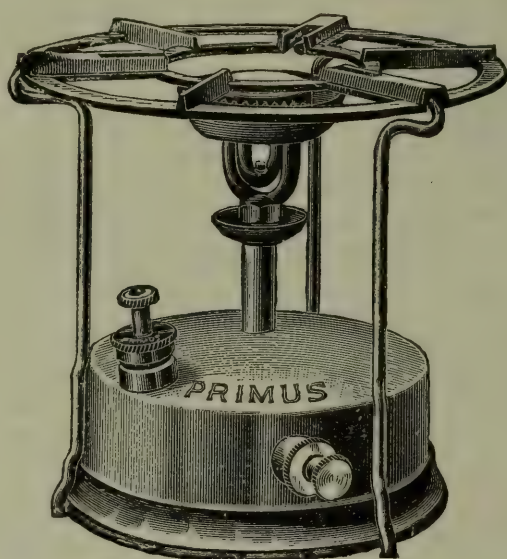
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Now is the Winter of our discontent past
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Thus it is that you should be getting your

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in shape. And one of the most important items on the list is



A PRIMUS STOVE

Here you are
But this is only one
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WE MAKE THEM

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For 1900 every base-ball player who is particular about the quality of his supplies and at the same time appreciates a saving of cost will use "The Ingersoll" line—*none better in the world—one-third lower than usual in price* **UNIFORMS.**—Notwithstanding their extremely low prices, our Uniforms are all made of reliable material, thoroughly tailored and handsomely finished. *We guarantee that our Uniforms cannot be equalled for double price elsewhere.* Each uniform includes Shirt with eight letters, padded Pants and Cap, Hose and Belt to match. Made in appropriate colors and present a handsome appearance on the diamond.

GRADE A. Clubs of nine \$2.25—each **\$2.50**

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Catalogue, samples of materials, and self-measurement blanks mailed free.

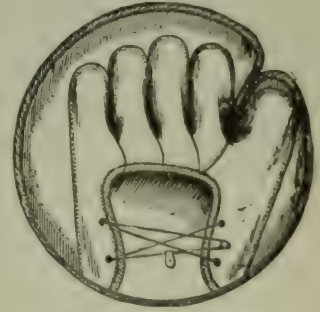
These are only instances. Our catalogue shows complete lines in every case, including Victor Sporting Goods.

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A really serviceable all-leather boy's mitt, worth 50c. (postage 8c extra), **25c.**

Men's well padded "Victor" Catcher's Mitt with thumb support and palm pad, (postage extra), **60c.** Other mitts at 95c., \$1.15, \$1.50, up to \$3.90.

Fielder's Gloves—drab leather, well padded, extra heel pad, **\$1.00.** Lighter padded gloves, 75c and 50c. (Postage 6c extra on gloves.)



Base-Balls—The Victor Official League Base-Ball, that sells everywhere at **\$1.00** \$1.25, only,

The Ingersoll Amateur League Base-Ball is lively and durable, and stands as much batting **50c** as the average dollar ball,

Postage on Balls 6 cents extra.

Catalogue of base-ball goods, bicycles, suits and sundries, tennis, golf and all athletic goods mailed free.

Guarantee Any article not found satisfactory upon receipt may be returned or exchanged if unsoiled.

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Dept.
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67 Cortlandt St., New York City.

Tremendous Muscular Force, Endurance, Energy and Alertness

QUICKLY ACQUIRED BY THE USE OF THE

KALLITHENOS OR FORCE CLUB

"THE CLUB WITH LIFE IN IT"

Nothing ever used or conceived like it! Concealed weights and springs, plunging and bounding as it is swung, make the exercise like wrestling with a live thing. You **CAN'T** use it, like other exercises, in an indifferent, half-hearted way. It brings out all your muscle and mind. Gives robust health, magnificent development, grace and celerity of movement. The club is "a beautiful piece of work," aluminum, nickel and polished steel.

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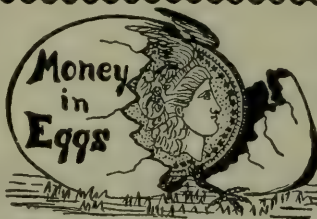
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Elk, Deer, Jack Rabbits, Squirrels, Quails, White Swans, Odorless Skunks, etc. Address

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**Barred
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Rocks are
THE MOST PROFITABLE FOWLS**

Easy to raise, large, superior for the table, best egg producers. Thrive in small space. The fancier's favorite. **EGGS, \$2.00 PER 13, FORTY FOR \$5.00.** All from purest bred, high-scoring birds. Packed to ship perfectly ANY DISTANCE. Plymouth Rock booklet free.

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IOWA CITY, IOWA.

White and Buff Wyandottes**BRED FOR UTILITY AND BEAUTY**

My egg record has never been equalled by any White Wyandotte breeder.

I won 3 ribbons out of 5 in the great New York Show.

At the Riverside Show in California, in hot company, composed of both Eastern and Western birds, I won 1st and 3rd in cocks, 1st in pullets, and special for the highest scoring bird in the entire show.

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For Sale: Live Buffalo, Elk, Mountain Sheep, Antelope, Mule Deer, Wolves, Black, Brown, Cinnamon and Grizzly Bears. Prompt and careful shipments.

Hunting and tourist parties outfitted and guided, at reasonable rates. Expert guide: always employed.

References: Arthur Brown, Supt., Philadelphia Zoo; E. M. Bigelow, Chief, Dept. of Parks, Pittsburgh, Pa.; W. T. Hornaday, Director, N. Y. Zoo Garden and G. O. Shields, Editor RECREATION.

Address Howard Eaton, Medora, N. D.

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ARTISTIC LIFELIKE MOUNTING OF

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A specialty made of mounting entire collections, restoring torn or damaged specimens and all difficult work.

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From twenty varieties of land and water fowls

Large circular free by mentioning RECREATION

W. E. MORRISON

Fox Lake, Wisconsin

A Laughlin Fountain Pen, listed at \$3, for 3 yearly subscriptions to RECREATION. Every camper knows the advantage of having a good fountain pen in his pocket, and this is one of that kind.

FISHING ON THE PICTURESQUE ERIE.

The Erie Railroad Company has just issued a new, enlarged and thoroughly revised edition of its Fishing Book, which will be of much interest to anglers. It contains accurate information of how and where to fish in the best lakes, streams and ponds on all divisions of the Erie, and the New York, Susquehanna and Western Railroads, within a distance of 200 miles from New York. The book is a directory, with concise information as to distances, rates of fare, cost of boats, kinds of fish, and the localities in which the best sport may be found. The active interest taken by the Erie in maintaining a high standard of sport along its line is shown by the great number of lakes and streams which, through its efforts, have been thoroughly stocked by the State and National Fish Commissions in the last few years. The book is handsomely illustrated and can be obtained from Erie ticket agents or by sending 3 cents in stamps to the General Passenger Agent, No. 21 Cortlandt St., New York.

For Sale: Savage .303 Rifle, 26 inch full Octagon Barrel, 1899 model; canvas cover; 80 soft loads. Rifle practically new; used for only 19 shots. All in first class condition. Have no use for it. Write for price. O. M. Grissinger, Hanlin Station, Washington Co., Pa.

For Sale: Savage rifle, 26 inch barrel, Lyman peep and bead sights, fancy pistol grip and check piece. In fine condition. \$20. Cost \$35. C. H. B., 23 Second St., Ilion, N. Y.

Wanted: Good elk teeth in any quantity, for cash. Albert Edholm, 107 North 16th St., Omaha, Neb.

BEAUTIFUL WOMEN.

Nothing about a woman's personal appearance is so unsightly, unnatural and embarrassing as a superfluous growth of hair on the face, neck and arms. Nature never intended it to be so, and the woman afflicted is handicapped as long as such a condition exists. A Russian woman, Madame Janowitz, discovered and marketed a preparation which is to-day renowned throughout Russia and France. American women are now given the opportunity to avail themselves of this wonderful preparation, known as "Russian Depilatory." It will remove all unnatural growths of hair, leaving the skin clear and soft as that of a babe, and this without the painful effects usually attendant on the applications of other remedies of this nature. An interesting booklet of information on this subject will be sent for the asking. Address Madame Benoit, 489 Fifth avenue, New York.

Special Sale of High Grade Tackle

Our \$15 "MONARCH" grade of genuine hand-made split bamboo Fly and Bait Rods are celebrated throughout the United States. Every rod is thoroughly warranted and many of our customers have told us that they were equal to the best rods they had ever seen.

Each rod is made by hand from carefully selected bamboo with generous windings and the highest quality of finish. The mountings are of genuine German silver with finest cork hand grips. They are made in several lengths and weights.

Fly rods, 9 to 10 ft. 6 in. and from 4 to 7 oz.

Bait rods, 7 to 10 ft. and from 6 to 12 oz.

Each rod in a covered form and a substantial canvas case. Special price to RECREATION readers, \$10.

A "FRANKFORT" reel of very fine quality and light weight is offered this month at a special price.

The greatest reel concern in Kentucky has discovered an aluminum alloy that is at once hard, unyielding, very tough and wonderfully light. It looks exactly like sterling silver and retains a beautiful finish. All the heavy parts of the reel are made of this metal, the bars, spool heads and balance handle are made of German silver, the pinions are of Stubbs' English steel rod and the gear cut from drawn brass rod.

Each reel has click and drag and is quadruple multiplying, the spool is $1\frac{1}{2}$ in. long and has a 2 in. head and the reel holds 80 yards. With a little care it will last 20 years. Special price, \$12.

"MOOSFHEAD" enameled waterproof line, the finest line for the money in the world today. Put up 25 yds. on a card, 4 connected. Special price per card for size H, small, 40c; size G, medium, 50c; size F, med. large, 60c.

The "NATCHAUG" celebrated waterproof lines at a special price. This brand of waterproof line is probably better known than any in the market, and we have never before offered it at so low a price. Put up 25 yds. on a card, 4 cards connected. Special price per card, No. H, small, 30c; No. G, medium, 40c; No. F, medium large, 50c.

LEADERS. Special price for this occasion. Our extra quality tested "Hercules" leaders, stained an invisible coffee color. Each leader made with loops and put up on a card. Price each, 1 yd. single, 10c; per doz., \$1; 2 yds., 20c each; 1 yd. double, 20c each; 2 yds. double, 40c each.

FLIES. Specially fine imported trout flies in all the leading patterns. These are double wing flies tied to our special order on bronzed pennel hooks with helpers on special coffee-colored gut and no such flies have ever been offered in this country for the money. Put up half a doz. of a kind on a card. Special price per card, 30c.

We desire every reader of RECREATION to carefully consider the above prices. Each article offered is the best of its kind and money will be freely returned if the goods are not satisfactory in every way.

Henry C. Squires & Son
20 Cortlandt St., New York.

SOME GOOD GUIDES.

Following is a list of names and addresses of guides who have been recommended to me, by men who have employed them; together with data as to the species of game and fish which these guides undertake to find for sportsmen.

If anyone who may employ one of these guides should find him incompetent or unsatisfactory, I will be grateful if he will report the fact to me.

COLORADO.

W. H. Hubbard, Glenwood Springs, elk, bear, deer antelope, trout, and grouse.

J. M. Campbell, Buford, ditto

FLORIDA.

Carson Bros., Frostproof, Polk Co.

IDAHO.

W. L. Winegar, Egin, Fremont Co., elk, bear, deer, antelope, mountain sheep, trout and grouse.

Geo. Winegar, St. Anthony, Fremont Co., di to

John Ching, Kilgore, Fremont Co., "

R. W. Rock, Lake, Fremont Co., "

Clay Vance, Houston, Custer Co., "

H. W. Johnson, Shoshone, "

J. B. Crapo, Kilgore, "

Chas. Pettys, "

MAINE.

James A. Duff, Kineo, Moosehead Lake, moose, caribou, deer, grouse and trout.

I. O. Hunt, Norcross, ditto

MINNESOTA.

E. L. Brown, Warren, ducks, geese, prairie chickens, and black bass.

MONTANA.

James Blair, Lakeview, elk, bear, deer, antelope, mountain sheep, trout and grouse.

W. A. Hague, Fridley, ditto

Vic. Smith, Anaconda, "

M. P. Dunham, Woodworth, "

William Jackson, Browning, "

A. H. McManus, Superior, "

A. T. Leeds, Darby, "

Geo. M. Ferrell, Jardine, Park Co., "

Chas. Marble, Aldridge, Park Co., "

NEW YORK.

E. W. Kinne, Mongaup Valley White Lake, Sullivan Co., deer, grouse, rabbits, squirrels and trout.

Henry N. Mullin, Box 74, Harrisville, N. Y., deer grouse, rabbits, squirrels and trout.

NORTH CAROLINA.

Fred. Latham, Haslin, deer, quails, ducks, salt-water fishing.

F. S. Jarvis, Haslin, ditto

WYOMING.

Mark H. Warner, Ten Sleep, elk, bear, deer, mountain sheep, antelope, grouse and trout.

James L. Simpson, Jackson, ditto

Milo Burke, Ten Sleep, "

Nelson Yarnall, Dubois, "

S. A. Lawson, Laramie, "

Cecil J. Huntington, Dayton, "

J. L. Simpson, Jackson, "

Frank L. Peterson, Jackson, "

S. N. Leek, Jackson, "

CANADA.

Dell Thomas, Lumby P. O., B. C., deer, bear, sheep, goats, grouse and trout.

Geo. E. Armstrong, Perth Centre, N. B., moose caribou, deer, grouse and trout.

Adam Moore, Scotch Lake, York Co., N. B., moose, caribou, deer, grouse and trout.

W. A. Brewster, Banff, Rocky Mountain Park, Can., bear, sheep, goats, grouse and trout.

NEWFOUNDLAND

Geo. Gillard, Little Bay, Notre Dame Bay, caribou, trout and salmon.

Is Your Gun Worth Saving?

Is Your Time Worth Anything?

The Gun Bore Treatment

WILL SAVE BOTH

It is an absolutely effective and permanent protection against the **Rusting, Pitting and Leading** of the bore of Firearms.

Stop Cleaning Your Gun!

If this interests you, write to the

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HUNTER
AND GUIDE

For S. E. Alaska, Cook's Inlet and
the Alaska Peninsula

Moose, Caribou, Mountain Sheep, Mountain Goat, Bear, Deer, Shore Birds and Waterfowl

Information furnished as to Mill Sites, Timber, Locations for Salmon Canning and Trapping

Address, JUNEAU, ALASKA

References: Lieut. G. T. Emmons, U. S. Navy, Navy Dept., Washington, D. C.; Hon. Will D. Jenkins, Sec. of State, Olympia, Wash.; G. O. Shields, Editor RECREATION.

Are you planning a hunting trip for next summer or fall? If so write me. I have a complete packing and camping outfit for several men, also an ample supply of horses, saddles, etc.

My ranch is in the foothills of the Big Horn Mountains, where elk, deer, bear and antelope may still be found in fair numbers. Also fine trout fishing. Rates reasonable.

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Scenery on route from here to Park finest to be seen on any trip in the mountains.

Address Geo. B. McClelland, Red Bank, Wyo.

The Teton Guides' Association

OF JACKSON, WYO.,

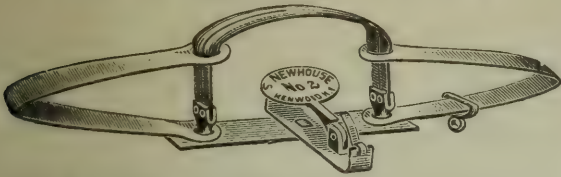
Enjoyed a very prosperous season last year, all their Guides being employed, giving perfect satisfaction in every instance. For the season of 1900 they are better prepared than ever to handle hunting parties in the Jackson's Hole country, or tourists for the Yellowstone National Park.

Their prices are as low as consistent with first-class services. Reference furnished on request. Correspondence solicited. For further particulars address the secretary.

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PREMIUMS PLEASE SPECIFY
WHETHER YOU WISH RIFLE
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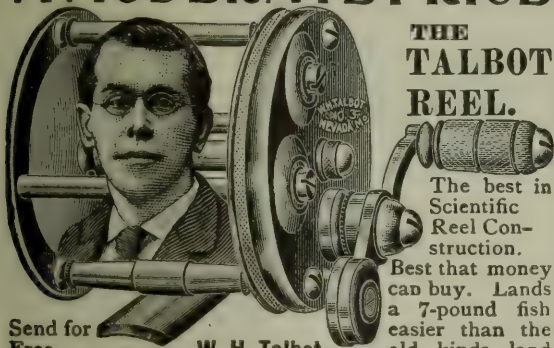


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The best in
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Best that money
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a 7-pound fish
easier than the
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PRACTICAL POINTERS FOR ANGLERS

This book gives plain directions for catching Black Bass, Striped Bass, Pickerel, Wall-eyed Pike, Muscallonge and all game fishes.

The proper kind of Boats, Rods, Reels, Lines, Hooks, Baits, etc. to use, and how to use them; weather conditions, etc.

A valuable book for rod and line fishermen.

SENT TO ANY ADDRESS FOR 10c.

Stamps or Silver

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For Sale: Best and most taking bait for fresh water anglers' use. My own discovery, used successfully by me for 20 years. Recipe 50 cents. Rodney West, Minerva, N. Y.

For Sale: Foxhound puppies, Walker & Goodman strain, whelped April 9th. Alex. Johnson, West Salem, Wis.

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At the Head of Cranberry Lake.
Newly Built and Furnished

Best Hunting and Fishing Rates
Grounds in the Adirondacks a Day **\$2.00**

Guides Furnished. Stage from Newton Falls to connect with steamer.

GEORGE R. NUNN, Proprietor

SMALL PROFITS

QUICK SALES

Trout Flies



FOR TRIAL, SEND

15c for an assorted sample doz.
Regular Price, 24 cents.

30c for an assorted sample doz.
Regular Price, 60 cents.

60c for an assorted sample doz.
Regular Price, 84 cents.

60c for an assorted sample doz.
Regular Price, 84 cents.

Quality A Flies

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SPLIT BAMBOO RODS

Fly Rods
10 feet, 6 ounces

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Bait Rods
9 feet, 8 ounces

WITH CORK GRIP

Try our New

Braided Silk Enameled Waterproof

METAL CENTRE LINE

Size No. 5, 4½c per Yard

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PUT UP IN 10-YARD LENGTHS CONNECTED

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TACKLE catalog free on application.

IF IT ISN'T A MILAM IT ISN'T A KENTUCKY REEL
LITTLE FISH DON'T BREAK TACKLE.

It's the big ones that escaped because you used a substitute for the only *real* reel, the

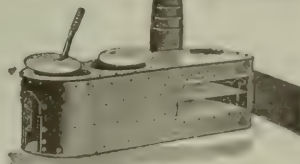
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FRANKFORT-KENTUCKY
REEL**

Try it and acquire some more satisfactory fish stories.

B. C. MILAM & SON, Frankfort, Kentucky.
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A Practical Common Sense
in 6 Sizes.

CAMP STOVE



Either with or
without oven. The
lightest, strongest,
most compact practical
stove made.
Cast combination
sheet steel top,
smooth outside,
heavy lining in fire

box and around oven, holds its shape, telescopic pipe
carried inside the stove. Burns larger wood and keeps
fire longer than any other. Used by over 9,000 campers
and only one stove returned.

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D. W. CREE, Manufacturer, Griggsville, Ill.

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Good Hunting, Fishing and Boating
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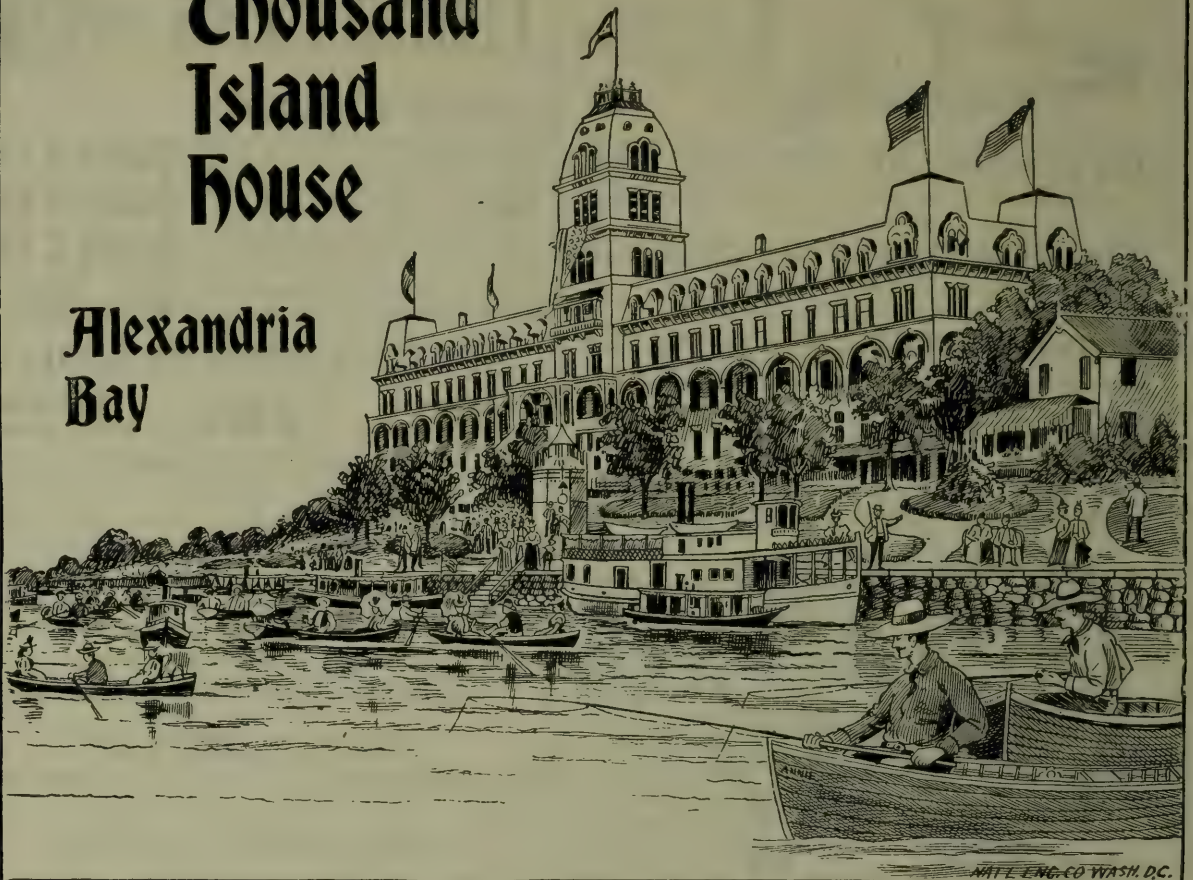
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St. Regis Falls, N. Y., Franklin Co.

Thousand Island House

Alexandria
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The Venice of America

PURE AIR, BEAUTIFUL SCENERY,
DEEP, BLUE, COLD WATER,
PICTURESQUE, ROCKY ISLANDS

Covered with cedar, spruce, pine and other evergreens; delightful rowing and sailing privileges; perfect quiet, ideal rest for tired brains and nerves; 1692 islands within a day's journey.

SHOOTING THE RAPIDS OF THE ST. LAWRENCE

is one of the exciting experiences enjoyed by travelers through the Thousand Island region. The thrilling passage is made by daylight on the steamers of the Richelieu and Ontario Company's line. The course is from the Galloups, through Lake St. Francis, the Cascades and the Lachine Rapids until the feat is finished by sailing under the Victoria Bridge to the wharves of Montreal. The Duke of Argyle said it was worth crossing the Atlantic to see the rapids of the River St. Lawrence.

AMONG THE NOTABLE VISITORS

to this far-famed region have been in the past many distinguished men. John Van Buren, Silas Wright, Frank Blair, Preston King, Gov. Seward, Martin Van Buren, Charles Dickens, the Duke of Argyle, George B. Warren, Rev. George B. Bethune, and Gen. Dick Taylor were regular patrons in the early days of the success of this section as a summer resort. Later Gen. Arthur, Gen. and Mrs. U. S. Grant, Gen. Phillip Sheridan, Gen. Starring, Cardinal McCloskey, Herbert Spencer, Charles Dudley Warner, Will Carleton and Ex-President and Mrs. Cleveland have sojourned amidst the beauties of the scene.

O. G. STAPLES,	{ Owners and Proprietors, }	Alexandria Bay, NEW YORK.
G. DeWITT,		

Write for rates and Illustrated Booklet.

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The New Summerland

Is most easily and quickly reached by the splendid steel steamers of the

YARMOUTH LINE

Sailing from Lewis Wharf, Boston, at 2 P. M., every Tuesday and Friday. Connections at Yarmouth by boat and train for all points in the Maritime Provinces.

Additional sailings during the Summer Months.

For guide books, descriptive folders, and other information, address nearest ticket office.

—OR—

H. F. HAMMOND, Agent,
YARMOUTH STEAMSHIP CO., Ltd.,
43 Lewis Wharf, Boston, Mass.

For Sale or Exchange: Fifteen feet Bowdish canoe, rigged with oars, good condition. Also .44-75 Remington with Livermore telescopic sight and all reloading tools. Perfect inside. Want .22 for indoor shooting or best offer.

Dr. A. D. Wells, Skaneateles, N. Y.

For Sale: Dark brown Cocker Spaniel, male pup, 6 months old.

G. J. Klotzbach, Froelich, Iowa.

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own Beloved Country...**BALMY CALIFORNIA**

The Grandest Winter Resort in the World

Why Risk a Winter Ocean Voyage when
you can reach the Italy of America
via the Finest Train that was
Ever Constructed?

THE SUMPTUOUS

"SUNSET LIMITED"

Special through trains consisting of sleeping and dining cars will leave New York every Saturday and Tuesday, connecting directly with the "Sunset Limited" at New Orleans.

For full information, free illustrated pamphlets, maps and time tables, also lowest rates, sleeping car tickets and baggage checked, apply to Southern Pacific Co., 349 Broadway, or 1 Battery Place, (Washington Building), New York City.

A sample copy of the "Sunset" Magazine, a monthly publication devoted to the development of the Pacific coast, will be sent on application on receipt of 5 cents in stamps.

Corning, Ohio, Jan. 11th, 1900.

Gray & Barger, 309 Broadway, New York City

Gentlemen—The Barger Sight beats any
thing I ever saw, and is a great help to an
expert, as well as to a novice.

Yours truly, C. O. Hawkins.

Wanted: 18 to 25 foot gasoline launch.
Send description of boat and engine, and
price.

J. P. Hinton, Hannibal, Mo.

IT'S BETTER HERE**THIS SUMMER****TRY THE MOUNTAINS**

THE KITTATINY AND POCONO RANGES—PEER
OF THE ADIRONDACKS—ARE BUT 214
MINUTES FROM NEW YORK.

TRY THE LAKES

THERE ARE 51, OVER 900 FEET ABOVE
SEA LEVEL, WITHIN 120 MINUTES OF NEW
YORK. LAKE HOPATCONG, NEARLY 1000
FEET HIGH, IS BUT 42 MILES FROM NEW YORK.

**Lackawanna
Railroad****AND****Lackawanna
Railroad****TRY THE MINERAL SPRINGS**

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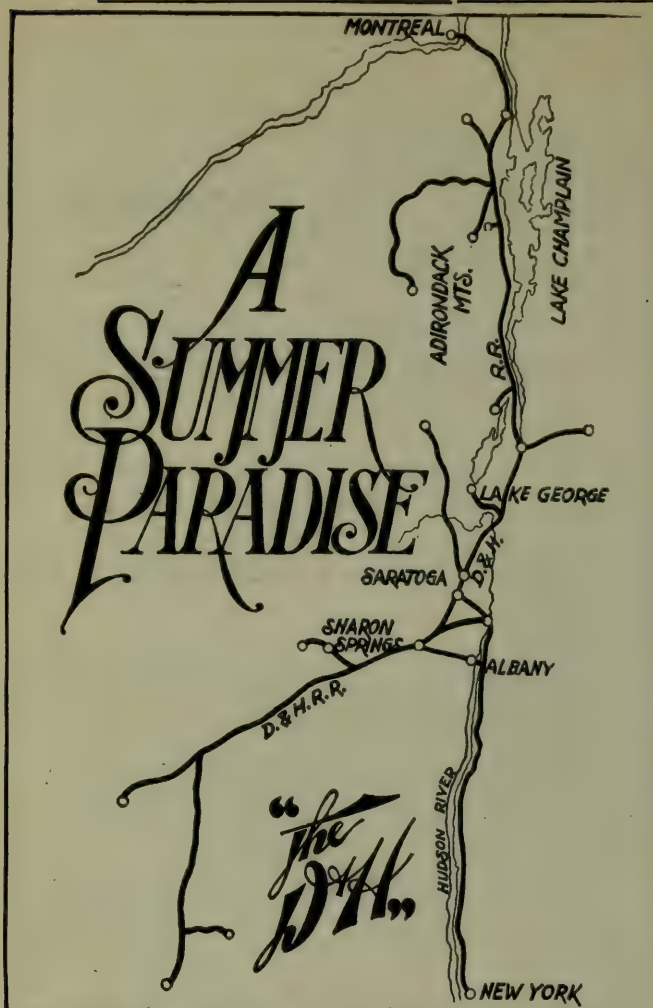
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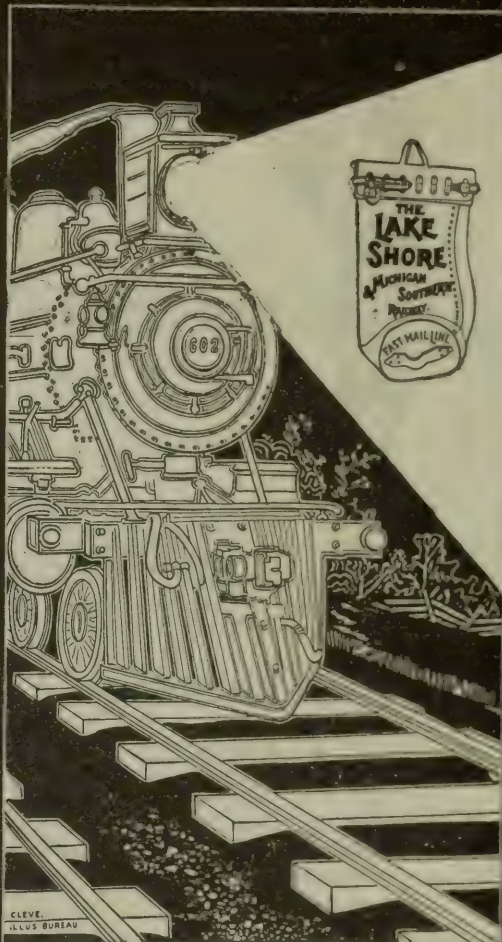
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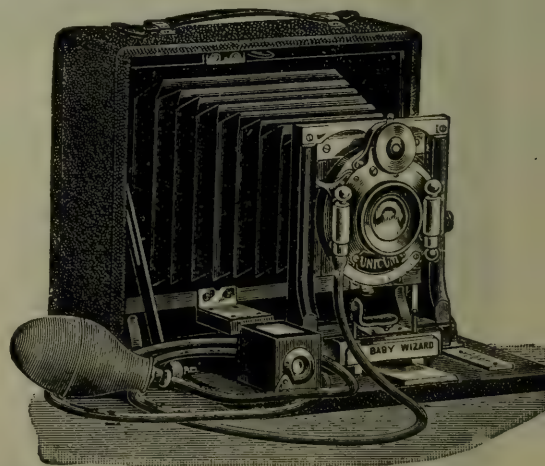
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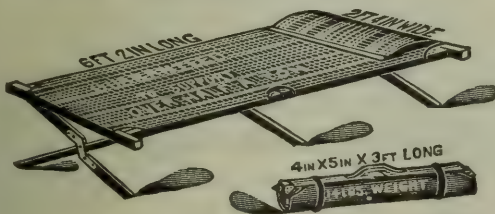
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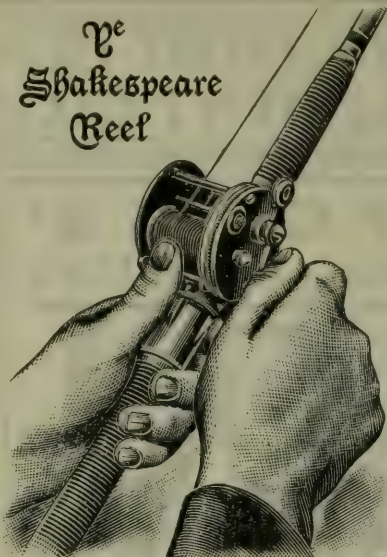
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THE LITTLE FINGER DOES IT

Controls the spring which winds
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The longest official cast ever made was with our Automatic Reel

OUR 1900
ALUMINUM
MODEL

light, durable
and non-corrosive—Strong,
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TO TURN

NEVER
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SLACK
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Send to the makers,
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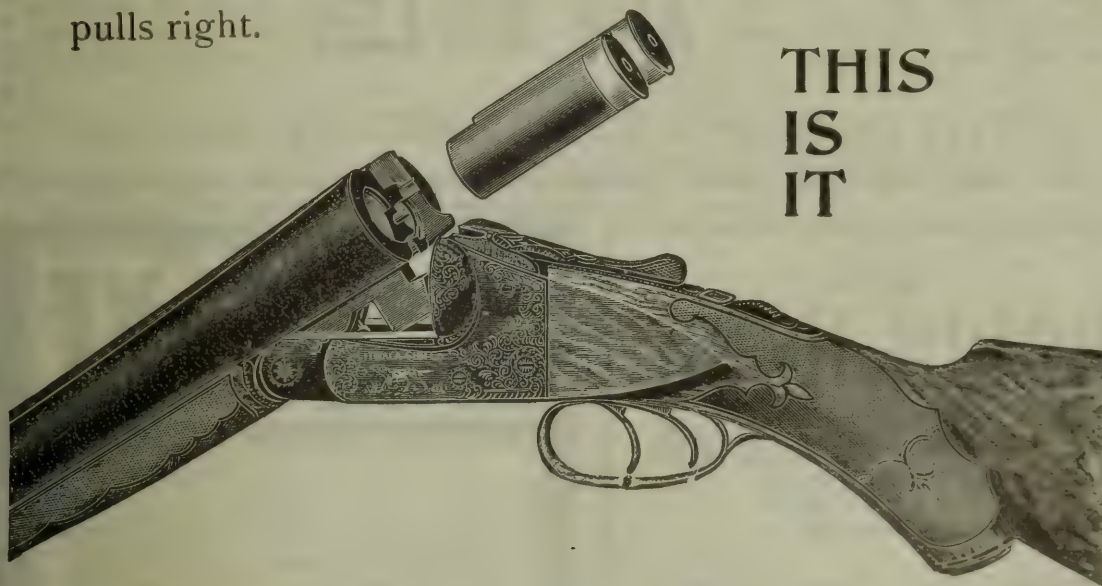
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If you keep on shooting
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Not so if you use

AN ITHACA

Any man who shoots AN ITHACA will make clean kills from start to finish, if he holds right and pulls right.



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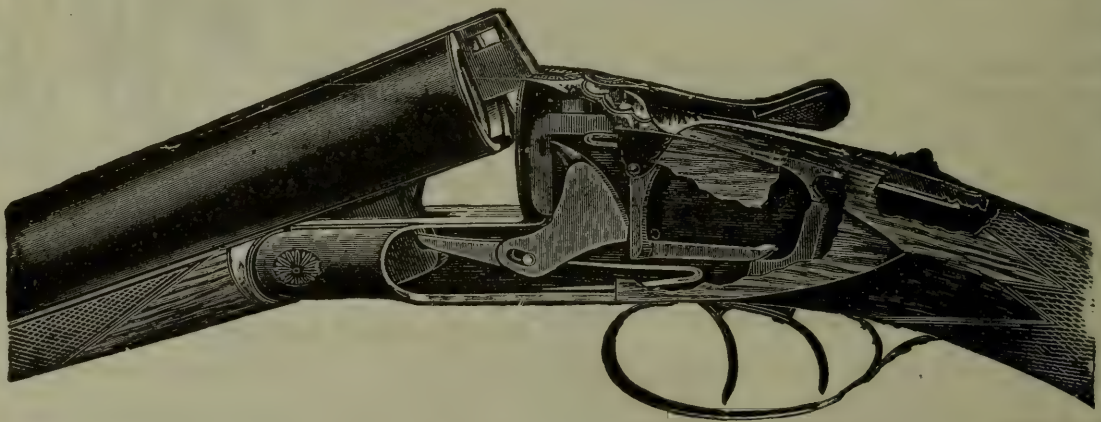
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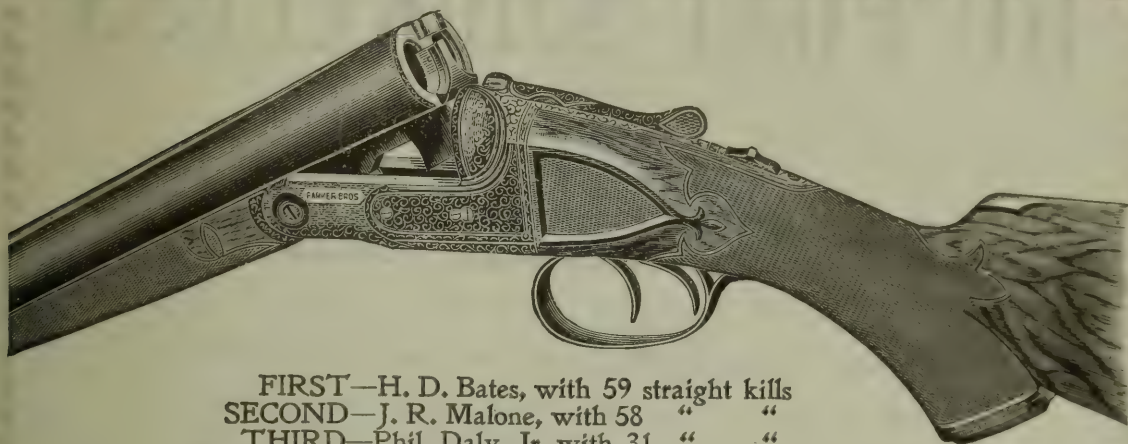


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1900

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NOTE THESE FIGURES, TAKEN FROM OFFICIAL RECORD

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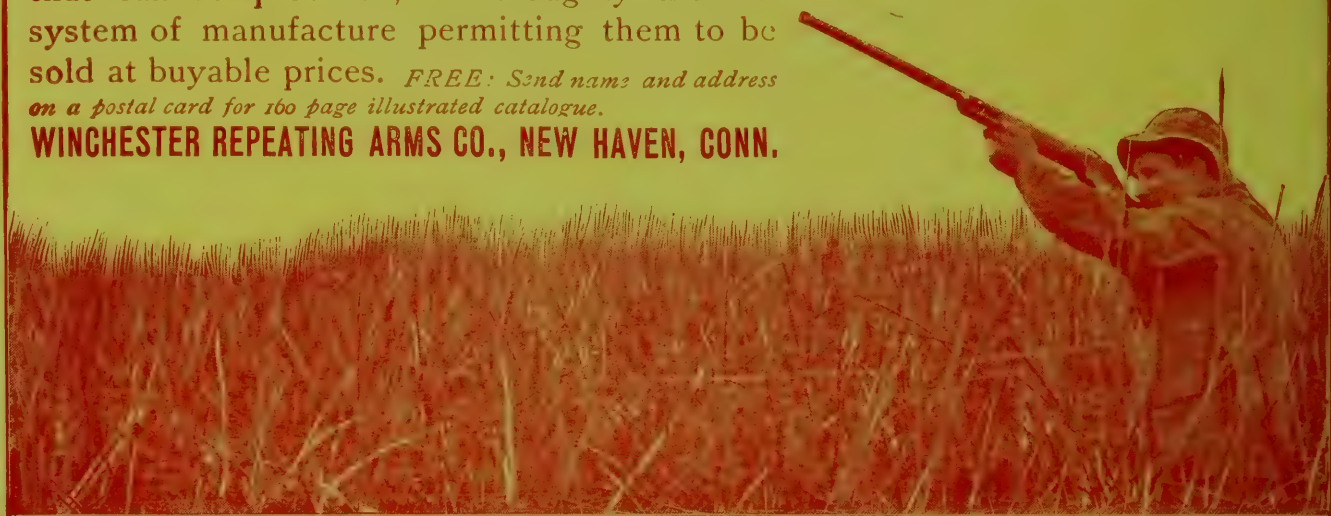
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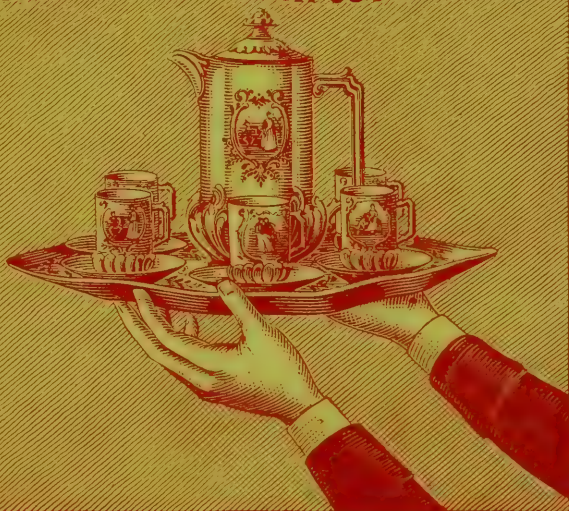
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FINE CHINA, RICH CUT GLASS.



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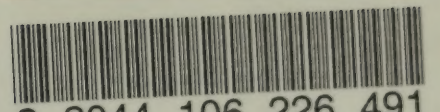
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